Environment Canada | Environnement Canada

Detailed Surface Water Quality Data
Alberta, Manitoba, Northwest Territories and Saskatchewan

Données détaillées sur la qualité des eaux de surface
Alberta, Manitoba, Territoires du Nord-Ouest et Saskatchewan

1983

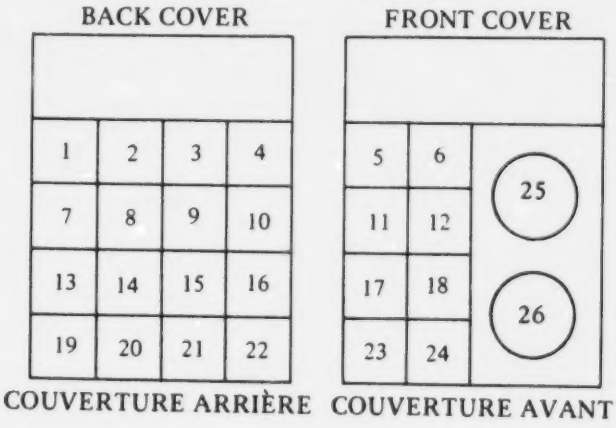
87-02575/

The patterns used to illustrate the cover of this publication are typical of the forms in which results are obtained from the instruments used in Water Quality Branch laboratories. The instruments which produced these patterns are only a few of the many instruments in regular use. The list below and the diagram can be used to identify the instruments which produced the patterns:

Auto Analyser: 2, 5, 10, 12, 19, 22
Calibration Curves, Auto Analyser: 23
Polarograph: 1, 6, 11, 21
Gas Chromatograph: 3, 8, 9, 13, 14, 16, 18, 20, 24
Infrared Spectrophotometer: 4, 17
Mass Spectrometer: 7, 15
Computer: 25, 26

Les dessins de la page couverture illustrent la forme sous laquelle on recueille les données obtenues par les appareils des laboratoires de la Direction de la qualité des eaux. Les appareils en question ne représentent qu'une partie de tous ceux qui sont couramment utilisés. La liste qui suit et le schéma peuvent servir à les identifier.

Auto-analyseur: 2, 5, 10, 12, 19, 22
Courbes d'étalonnage d'auto-analyseur: 23
Polarographe: 1, 6, 11, 21
Chromatographe en phase gazeuse: 3, 8, 9, 13, 14, 16, 18, 20, 24
Spectrophotomètre infrarouge: 4, 17
Spectromètre de masse: 7, 15
Ordinateur: 25, 26



COUVERTURE ARRIÈRE COUVERTURE AVANT

Environment Canada Environnement Canada

Detailed Surface Water Quality Data

Alberta, Manitoba, Northwest Territories and Saskatchewan

Données détaillées sur la qualité des eaux de surface

Alberta, Manitoba, Territoires du Nord-Ouest et Saskatchewan

1983

INLAND WATERS DIRECTORATE
WESTERN AND NORTHERN REGION
WATER QUALITY BRANCH
REGINA, SASKATCHEWAN, 1986

DIRECTION GÉNÉRALE DES EAUX INTÉRIEURES
RÉGION DE L'OUEST ET DU NORD
DIRECTION DE LA QUALITÉ DES EAUX
REGINA, SASKATCHEWAN, 1986

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Abstract

Chemical, physical and biological surface water data collected in Alberta, Manitoba, Northwest Territories and Saskatchewan during 1983 are detailed herein. These data are intended to provide a ready reference to the water quality variables measured.

Résumé

Le présent document renferme les données chimiques, physiques et biologiques recueillies en 1983 sur les eaux de surface en Alberta, au Manitoba, dans les Territoires du Nord-Ouest et en Saskatchewan. Ces données devraient permettre la consultation rapide des variables se rapportant à la qualité des eaux.

INTRODUCTION

The chemical, physical and biological data collected from selected surface waters in Alberta, Manitoba, Northwest Territories and Saskatchewan during 1983 are presented in this report. These data were obtained from a number of Water Quality Branch programs and therefore the amount of available data varies from site to site.

During 1983 the regional laboratory was moved from Calgary to Saskatoon and the Burlington laboratory was expanded to provide selected tests on regional samples. In some cases this prompted a change to the analytical method or a change to the detection limit. These changes are reflected in the coding associated with each result.

Data collection by the Branch may be done either as a special study or survey or as part of a long-term monitoring program. Special studies or surveys are usually of short duration with specific objectives such as determining the source, the pathways, or the distribution of a pollutant in the aquatic environment. Long-term monitoring may be defined as the systematic collection of samples at strategic locations to provide an overview of the water quality in the aquatic system. This baseline information supports work for assessing trends in the aquatic environment, establishing water quality objectives and assessing the impacts of development.

This report belongs to the series of detailed water quality data reports published for the Western and Northern region since 1974. These publications are intended for those who desire detailed information on available water quality variables. Earlier reports were published separately for each province and Northwest Territories and covered periods of 2 and 3 years.

The data contained in this report are stored on the NAQUADAT computerized storage and retrieval system. While these data are edited prior to publication, they remain subject to post-publication revision.

The assistance of personnel from the Water Quality Branch, Hull/Ottawa, in preparing the data retrievals and maps for this report is gratefully acknowledged.

INTRODUCTION

Le présent rapport traite des données d'ordre chimique, physique et biologique relatives à des eaux de surface choisies de l'Alberta, du Manitoba, des Territoires du Nord-Ouest et de la Saskatchewan. Ces données ont été obtenues à partir d'un certain nombre de programmes, de la Direction de la qualité des eaux, durant 1983 et par conséquent, l'ensemble des données disponibles, varie d'emplacement à l'autre.

En 1983, le laboratoire régional a été déménagé de Calgary à Saskatoon. Le laboratoire de Burlington s'est équipé d'instruments qui lui permettent d'effectuer certains essais relatifs aux échantillons provenant des régions. Dans certains cas, on a dû changer soit la méthode analytique, soit la limite de détection. Le code de chaque résultat exprime ces changements.

La Direction entreprend la cueillette des données en raison soit d'une étude ou d'une enquête spéciale, soit d'un programme de contrôle à long terme. Les études spéciales sont habituellement de courte durée et possèdent des objectifs précis, comme de déterminer la source, les parcours ou la distribution d'un polluant dans l'environnement aquatique. Quant à la surveillance à long terme, on peut la définir comme une collecte systématique d'échantillons à des emplacements choisis, permettant d'obtenir un aperçu global de la qualité des eaux dans le système aquatique. Ces données servent ensuite de base à l'évaluation des tendances dans l'environnement aquatique, à l'établissement d'objectifs en matière de qualité des eaux et à l'évaluation des effets de l'aménagement.

Le présent rapport fait partie d'une série contenant des données détaillées sur la qualité des eaux. Cette série est publiée depuis 1974 pour le compte de la région de l'Ouest et du Nord. Ces publications s'adressent aux personnes qui désirent obtenir des renseignements détaillés relatifs aux variables disponibles sur la qualité des eaux. Les anciens rapports étaient publiés séparément pour chaque province et pour les Territoires du Nord-Ouest et couvraient des périodes de 2 ou 3 ans.

Les données, contenues dans ce rapport, sont emmagasinées dans la banque NAQUADAT, système de stockage et de recouvrement informatisés. Ces données ont été révisées avant d'être publiées, mais éventuellement, elles devront faire encore l'objet d'une révision ultérieure.

On remercie vivement le personnel de la Division de la qualité des eaux, à Hull et à Ottawa, pour leur aide dans l'extraction des données et la préparation des cartes.

GUIDE TO USE OF TABLES

Data in this report are arranged in order of the 12-digit code assigned to each station (NAQUADAT station number). This code incorporates the Water Survey of Canada basin and sub-basin designation. In the station number, the first two numerals refer to the water type (00 designates a stream, 01 a lake or reservoir) and they are followed by a two-letter provincial code (AL, MA, NW, SA for Alberta, Manitoba, Northwest Territories and Saskatchewan, respectively). The next two numerals and two letters refer to the basin and sub-basin respectively, followed by a final four-digit sequence number. An alphabetical station index and a station location map for each of the provinces and Northwest Territories are presented at the end of each section. For locations where a Station Parameter code (e.g. 97900S) is given, Water Survey of Canada discharge data are also available for that site. For those wishing to refer to specific discharge data for a site, the appropriate Water Survey Station Reference Number can be derived from the NAQUADAT station number by replacing its final four-digit sequence with the three digits following the station parameter code. Geographical coordinates of the sampling sites are also provided in the index.

GUIDE D'UTILISATION DES TABLEAUX

Les données sont disposées selon le code de 12 éléments assigné à chaque station (numéro de station NAQUADAT) et incluant la désignation de la Division des relevés hydrologiques du Canada relative aux bassins et aux sous-bassins. Les deux premiers chiffres se rapportent au type d'eau (00 désigne un cours d'eau, 01 un lac ou un réservoir) et sont suivis de deux lettres désignant la province (AL, MA, NW, SA pour Alberta, Manitoba, Territoires du Nord-Ouest et Saskatchewan respectivement). Ensuite viennent deux chiffres et deux lettres, respectivement pour le bassin et le sous-bassin, puis finalement un numéro séquentiel de quatre unités. Un index alphabétique des stations et une carte pour chaque province et pour les Territoires du Nord-Ouest identifiant leur emplacement paraissent à la fin de chaque section. La Division des relevés hydrologiques du Canada dispose également des données relatives au débit pour les stations auxquelles on a assigné un code paramétrique (p. ex. : 97900S). Les personnes qui désirent obtenir des données de débit précises, pour une station donnée, peuvent établir le numéro de référence approprié de la Division en remplaçant les quatre derniers chiffres du numéro de la station NAQUADAT par le code des unités, qui est indiqué à la suite du code paramétrique. L'index renferme également les coordonnées géographiques des lieux d'échantillonnage.

CODING OF ANALYTICAL METHODS

The analytical method employed is defined by the six-digit code number shown at the top of each column of data. If the analytical method used for a particular datum was different from the one indicated in the column heading, then the last three digits of the appropriate method code appear as backup codes beside the actual result. The parameter code number is of the form ZZXYYA where:

(1) ZZ is a numeric code designating the type of test as shown in the table following:

Tests	Parameter Code
Chemical tests	ATXYYA (AT-Atomic number)
Balances and other calculated parameters	00XYYA
General physical tests	02XYYA

CODES DES MÉTHODES ANALYTIQUES

La méthode analytique employée est indiquée par le code de six éléments paraissant à la tête de chaque colonne de données. Si, pour une donnée particulière, la méthode analytique utilisée était différente de celle indiquée en rubrique, les trois dernières unités du code de la méthode appropriée paraîtraient alors à côté de la donnée. Le numéro de code du paramètre se présente sous la forme ZZXYYA, où :

(1) ZZ est un code numérique désignant le type d'essai, conformément à la liste suivante :

Essais	Code paramétrique
Essais chimiques	ATXYYA (AT : numéro atomique)
Bilans et autres paramètres calculés	00XYYA
Essais physiques généraux	02XYYA

General chemical tests	10XYYA
Pesticides and herbicides	18XYYA
Bacteriological tests	36XYYA
Biological information	54XYYA
Other information	97XYYA, 98XYYA and 99XYYA

(2) X is a one-digit numerical code (0-9) subdividing group (1).

(3) YY is a two-digit sequential numerical code identifying the analytical method used for the test. In certain cases this field is used to further subdivide the type of tests described in (1) and (2).

(4) A is a one-digit alphabetical code indicating the place where the analysis was carried out, whether the sample was preserved and/or filtered, and whether the result is a mean or median of replicate analyses.

- S in situ analysis
- F field analysis
- L laboratory analysis
- P preserved in field; laboratory analysis
- D filtered in field; laboratory analysis
- R mean or median of laboratory analyzed replicates
- G filtered and preserved in field; laboratory analysis
- T mean or median of field filtered and preserved replicates; laboratory analyzed
- U mean or median of field analyzed replicates
- V mean or median of field filtered replicates; laboratory analysis
- W mean or median of field preserved replicates; laboratory or field analysis

In some cases values within the same column have different numbers of significant figures. This may occur when two or more analytical methods have been used to measure a particular parameter and generally reflects the increased precision of the newer method.

A complete description of all the parameter code numbers is given in the NAQUADAT Dictionary.

Essais chimiques généraux	10XYYA
Pesticides et herbicides	18XYYA
Essais bactériologiques	36XYYA
Renseignements biologiques	54XYYA
Autres renseignements	97XYYA, 98XYYA et 99XYYA

(2) X est un code numérique à un chiffre (0 à 9) qui subdivise le groupe (1).

(3) YY est un code numérique séquentiel qui précise la méthode analytique employée pour l'essai. Il sert quelquefois à subdiviser davantage le type d'essai décrit en (1) et (2).

(4) A est un code d'une lettre indiquant l'endroit de l'analyse et si l'échantillon a été conservé et/ou filtré et si le résultat est une moyenne ou une médiane des échantillons analysés.

- S analyse sur le lieu-même
- F analyse sur le terrain
- L analyse au laboratoire
- P conservé sur le terrain; analyse au laboratoire
- D filtré sur le terrain; analyse au laboratoire
- R moyenne ou médiane répétée d'échantillons analysés au laboratoire
- G filtré et conservé sur le terrain; analyse au laboratoire
- T moyenne ou médiane répétée des échantillons filtrés et conservés sur le terrain; analyse au laboratoire
- U moyenne ou médiane répétée des échantillons analysés sur le terrain
- V moyenne ou médiane répétée des échantillons filtrés sur le terrain; analyse au laboratoire
- W moyenne ou médiane répétée des échantillons conservés sur le terrain; analyse au laboratoire ou sur le terrain

Quelquefois, dans la même colonne, des codes ne possèdent pas le même nombre d'éléments. Cela peut arriver lorsqu'on a utilisé deux méthodes analytiques ou plus pour mesurer un paramètre donné et le code révèle la précision accrue de la nouvelle méthode.

Le dictionnaire NAQUADAT donne une description complète de tous les numéros de code paramétrique.

DEFINITION OF TERMS AND SYMBOLS

G	greater than
JTU's	Jackson turbidity units
L	less than
Lat.	latitude in degrees, minutes and seconds
Long.	longitude in degrees, minutes and seconds
MG/L	milligrams per litre
NAQUADAT	National Water Quality Data Storage and Retrieval System
Q	signifies that at least one of the values used in the computation of this result was reported as less than the detection limit. In the computation of calculated parameters analytical values reported as "less than the detection limit" are interpreted as being equal to the numeric value of the detection limit. For example, when computing total nitrogen, given a particulate nitrogen value of less than .01 milligram/litre (L.01 MG/L) and a dissolved nitrogen value of .36 MG/L, the numeric values would simply be added to give a total nitrogen Q.37 MG/L.
NO./100 ML	number per 100 millilitres
REL. UNITS	relative colour units
SUBM ID	submitter identification number. This identifies the sample collector and the project under which the data was collected.
UG/L	Micrograms per litre
USIE/CM	Microsiemens per centimetre

DÉFINITION DES TERMES ET DES SYMBOLES

G	plus grand que
JTU	unité de turbidité de Jackson
L	moins que
Lat.	latitude en degrés, minutes et secondes
Long.	longitude en degrés, minutes et secondes
MG/L	milligrammes par litre
NAQUADAT	banque nationale de stockage et de recouvrement des données sur la qualité des eaux
Q	signifie qu'au moins une des valeurs utilisées dans le calcul de ce résultat a été signalée comme étant inférieure à la limite de détection. Dans le calcul des paramètres, les valeurs analytiques signalées comme «inférieures à la limite de détection» ont été interprétées comme étant égales à la valeur numérique de la limite de détection. Par exemple, si l'on veut calculer la teneur en azote total, lorsqu'on a une valeur en azote particulaire de moins de .01 milligramme par litre (L.01 MG/L) et une valeur de .36 MG/L pour l'azote dissous, on n'a qu'à additionner les deux valeurs, ce qui donne pour l'azote total : Q.37 MG/L.
NO./100 ML	nombre par 100 millilitres
REL. UNITS	unités relatives de couleur
SUBM ID	identifie la personne qui a recueilli l'échantillon et le projet-cadre
UG/L	microgrammes par litre
USIE/CM	microsiemens par centimètre

ADDITIONAL INFORMATION

Additional information on these data or requests for data not included in this publication may be obtained from the appropriate office:

District Resource Officer
Water Quality Branch
Environment Canada
Rm. 854, 220-4th Avenue S.E.
Calgary, Alberta
T2P 2M7

Phone: (403) 292-5320

District Resource Officer
Water Quality Branch
Environment Canada
133-Freshwater Institute
501 University Crescent
Winnipeg, Manitoba
R3T 2N6

Phone: (204) 949-5035

Water Quality Specialist
Inland Waters Directorate
Environment Canada
Box 2970
Yellowknife, Northwest Territories
X1A 2R2

Phone: (403) 920-8516

District Resource Officer
Water Quality Branch
Environment Canada
Motherwell Building
1901 Victoria Avenue
Regina, Saskatchewan
S4P 3R4

Phone: (306) 780-5317

Questions specifically relating to analytical methodologies should be directed to:

Head, Analytical Services Division
Water Quality Branch
Environment Canada
115 Perimeter Road
Saskatoon, Saskatchewan
S7N 0X4

Phone: (306) 975-5389

RENSEIGNEMENTS SUPPLÉMENTAIRES

Pour obtenir d'autres renseignements ou pour des données non comprises dans le présent rapport, écrire à l'un des bureaux suivants :

Agent des ressources de district
Direction de la qualité des eaux
Environnement Canada
Rm. 854, 220-4th Avenue S.E.
Calgary (Alberta)
T2P 2M7

Téléphone : (403) 292-5320

Agent des ressources de district
Direction de la qualité des eaux
Environnement Canada
133-Freshwater Institute
501 University Crescent
Winnipeg (Manitoba)
R3T 2N6

Téléphone : (204) 949-5035

Spécialiste de la qualité des eaux
Direction générale des eaux intérieures
Environnement Canada
C.P. 2970
Yellowknife (Territoires du Nord-Ouest)
X1A 2R2

Téléphone : (403) 920-8516

Agent des ressources de district
Direction de la qualité des eaux
Environnement Canada
Motherwell Building
1901 Victoria Avenue
Regina (Saskatchewan)
S4P 3R4

Téléphone : (306) 780-5317

Pour toute question concernant la méthodologie analytiques, écrire à :

Chef, Division des services analytiques
Direction de la qualité des eaux
Environnement Canada
115 Perimeter Road
Saskatoon (Saskatchewan)
S7N 0X4

Téléphone : (306) 975-5389

ALBERTA

Detailed Data / Données détaillées

STATION - 00AL05AD0002
OLDMAN RIVER NEAR LETHBRIDGE, ALBERTA

LAT. 49D 42M 29S LONG. 112D 52M 30S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG C	02061L TEMP. WATER DEG C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-18	1430	479	4.0	21.1	363.	327.	--	8.2	5.0	3.2
83-02-15	1530	479	--	15.5	306.	316.	8.7	8.2	4.6	3.0
83-03-15	1500	479	6.0	20.5	389.	342.	8.2	8.2	25.0	18.0
83-04-12	1445	479	5.0	24.9	400.	382.	--	8.2	3.0	2.6
83-05-25	1600	479	18.0	21.1	251.	247.	7.9	8.1	160.0	120.0
83-06-14	0710	479	15.0	20.1	245.	250.	8.1	8.4	18.0	8.6
83-07-12	1430	479	19.0	17.3	303.	300.	8.5	8.5	16.0	8.8
83-08-16	1615	479	22.0	23.4	378.	367.	8.4	8.3	11.0	6.0
83-09-27	1330	479	10.0	17.9	404.	399.	8.6	8.4	5.0	4.3
83-10-19	1540	479	8.0	20.3	376.	373.	8.2	8.3	9.0	7.5
83-11-08	1415	479	3.0	16.3	359.	361.	8.3	8.3	6.0	5.6
83-12-06	1600	479	.5	6.5	376.	387.	8.0	8.1	7.0	4.5

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-18	1430	479	L5.	6.	--	.003	1020.	130.	380.	14.1
83-02-15	1530	479	5.	4.	--	L.001	120.	L2	29.	13.7
83-03-15	1500	479	30.	19.	--	L.001	2.	L2	320.	12.0
83-04-12	1445	479	10.	4.	--	L.001	2.	2.	L2	13.0
83-05-25	1600	479	10.	298.	--	.009	--	50.	110.	8.8
83-06-14	0710	479	5.	20.	--	.002	300.	18.	131.	9.8
83-07-12	1430	479	20.	12.	--	.003	390.	22.	37.	9.0
83-08-16	1515	479	10.	12.	--	.003	G800.	530.	55.	9.6
83-09-27	1330	479	L5.	4.	--	.001	1700.	30.	44.	10.1
83-10-19	1540	479	L5.	12.	--	.002	75.	20.	120.	11.3
83-11-08	1415	479	5.	5.	--	.001	L10.	L2	1800.	14.0
83-12-06	1600	479	L5.	3.	--	.001	16.	4.	32.	12.2

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-18	1430	479	0	0	171.	140.0	40.7	15.1	162.8	11.0
83-02-15	1530	479	0	0	158.	130.0	37.7	13.7	150.5	10.0
83-03-15	1500	479	0	0	171.	140.0	38.8	14.9	158.2	17.0
83-04-12	1445	479	0	0	189.	155.0	44.0	17.0	179.9	16.0
83-05-25	1600	479	0	0	128.	105.0	30.0	10.0	116.1	4.9
83-06-14	0710	479	1.	.6	133.	110.0	30.7	9.9	117.4	5.1
83-07-12	1430	479	3.	2.6	146.	125.0	35.2	12.7	140.2	8.4
83-08-16	1615	479	0	0	143.	117.0	32.2	16.3	147.5	19.0
83-09-27	1330	479	5.	3.8	161.	140.0	36.0	17.4	161.5	22.0
83-10-19	1540	479	0	0	171.	140.0 06L	41.0	15.7	167.0	14.0
83-11-08	1415	479	0	0	185.	152.0 06L	43.5	15.7	173.3	11.9
83-12-06	1600	479	0	0	189.	155.4 06L	44.4	16.4	178.4	11.8

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06504P CYANIDE TOTAL CN MG/L
83-01-18	1430	479	.9	1.6	.10	41.	2.2	197.	--	--
83-02-15	1530	479	.9	1.6	.08	40.	1.8	184.	--	--
83-03-15	1500	479	1.6	2.2	.10	48.	2.6	209.	--	--
83-04-12	1445	479	1.2	2.2	.09	54.	1.6	229.	--	--
83-05-25	1600	479	.8	1.0	.08	22.	4.4	136.	--	--
83-06-14	0710	479	.6	.8	.10	20.	2.8	136.	--	--
83-07-12	1430	479	1.0	1.3	.06	30.	3.2	167.	--	--
83-08-16	1615	479	1.6	1.9	.11	68.	1.4	211.	--	--
83-09-27	1330	479	1.5	2.2	.07	70.	.6	234.	--	--
83-10-19	1540	479	1.0	1.7	.11 08L	52.	2.1 02L	212.	--	--
83-11-08	1415	479	.9	1.5	.12 08L	48.	1.9 02L	215.	--	--
83-12-06	1600	479	1.0	1.3	.10 08L	42.	2.1 02L	212.	--	--

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05AD0002
OLDMAN RIVER NEAR LETHBRIDGE, ALBERTA

LAT. 49D 42M 29S LONG. 112D 52M 30S

DATE	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-18	1430	479	.010	L.003	Q.007	--	15	.15	.03	.18
83-02-15	1530	479	.013	.011	.002	--	11	.12	.04	.16
83-03-15	1500	479	.150	.008	.142	--	18	.19	.04	.23
83-04-12	1445	479	.007	.005	.002	--	09	.09	.05	.14
83-05-25	1600	479	.260	.004	.256	--	10	.10	.45	.55
83-06-14	0710	479	.024	.006	.018	--	.08	.10	.06	.16
83-07-12	1430	479	.019	.004	.015	--	10	.10	.04	.14
83-08-16	1615	479	.030	.013	.017	--	16	.15	.08	.23
83-09-27	1330	479	.011	.003	.008	--	15	.16	.04	.20
83-10-19	1540	479	.015	.004	.011	--	34	.32	.06	.38
83-11-08	1415	479	.009	.003	.006	--	07	.08	.05	.13
83-12-06	1600	479	.009	.002	.007	--	.14	.14	L.01	Q.15

DATE	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-18	1430	479	.08	L.1	1.5	.25	1.8	.04	L.0005	.0006
83-02-15	1530	479	.07	L.1	1.8	.26	2.1	.02	L.0005	.0007
83-03-15	1500	479	.04	L.1	2.7	.27	3.0	.06	L.0005	.0005
83-04-12	1445	479	L.01	L.1	1.4	.22	1.6	.02	L.0005	L.0005
83-05-25	1600	479	.05	L.1	2.3	4.20	6.5	.02	L.0005	L.0005
83-06-14	0710	479	L.01	L.1	1.7	.41	2.1	.04	L.0005	L.0005
83-07-12	1430	479	L.01	L.1	1.8	.33	2.1	.03	L.0005	.0005
83-08-16	1615	479	.01	L.1	2.1	.50	2.6	.04	.0008 08D	.0006 08D
83-09-27	1330	479	.03	L.1	1.8	.28	2.1	--	.0020 08D	.0009 08D
83-10-19	1540	479	L.01	L.1	1.5	.37	1.9	.03	.0010 08D	.0009 08D
83-11-08	1415	479	.01	L.1	1.7	.34	2.0	.03	.0013 08D	.0009 08D
83-12-06	1600	479	.10	L.1	1.3	.20	1.5	.05	.0010 08D	.0007 08D

DATE	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-18	1430	479	--	L.004	--	L.01	--	L.04	L.02	L.001
83-02-15	1530	479	--	--	--	L.01	--	L.04	L.02	--
83-03-15	1500	479	--	--	--	L.01	--	L.04	L.02	--
83-04-12	1445	479	--	--	--	L.01	--	L.04	L.02	--
83-05-25	1600	479	--	L.004	--	L.01	--	L.04	L.02	.011
83-06-14	0710	479	--	--	--	L.01	--	L.04	L.02	--
83-07-12	1430	479	--	--	--	L.01	--	.04	L.02	--
83-08-16	1615	479	--	L.005	--	L.01	--	L.04	.02	.002 02P
83-09-27	1330	479	--	--	--	L.01	--	L.04	L.02	--
83-10-19	1540	479	--	L.005	--	L.01	--	L.04	L.02	.001 02P
83-11-08	1415	479	--	--	--	L.02	--	L.04	L.02	--
83-12-06	1600	479	--	--	--	L.02	--	L.04	.04	--

DATE	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-18	1430	479	--	L.002	L.002	L.001	.013	L.001	.12	L.004
83-05-25	1600	479	--	.002	.011	.008	027	L.001	.22	.005
83-08-16	1615	479	--	L.001 02P	.001 02P	.002 05P	.002 05P	L.001 02P	.10 01P	L.001 02P
83-10-19	1540	479	--	L.001 02P	L.001 02P	.002 05P	L.001 05P	L.001 02P	.15 01P	.002 02P

STATION - 00AL05AD0002
OLDMAN RIVER NEAR LETHBRIDGE, ALBERTA

LAT 49D 42M 29S LONG. 112D 52M 30S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-18 1430 479	.002	L .001	.001	L .001	L .001	L .002	L .001	L .001
83-02-15 1530 479	L .001	--	--	--	--	--	--	--
83-03-15 1500 479	.003	--	--	--	--	--	--	--
83-04-12 1445 479	.001	--	--	--	--	--	--	--
83-05-25 1600 479	.011	L .001	L .001	L .001	L .001	L .002	L .001	L .001
83-06-14 0710 479	.002	--	--	--	--	--	--	--
83-07-12 1430 479	.001	--	--	--	--	--	--	--
83-08-16 1615 479	.003	L .001	.003	L .001	L .001	L .002	L .001	L .001
83-09-27 1330 479	.001	--	--	--	--	--	--	--
83-10-19 1540 479	L .001	L .001	.006	L .001	L .001	L .002	L .001	L .001
83-11-08 1415 479	.002	--	--	--	--	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-18 1430 479	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-05-25 1600 479	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-08-16 1615 479	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-10-19 1540 479	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-18 1430 479	L .001	L .003	L .002	L .2	007	L .009	L .004	L .002
83-05-25 1600 479	L .001	L .003	L .002	L .2	L .004	L .009	L .004	L .002
83-08-16 1615 479	L .001	L .003	L .002	L .2	080	L .009	L .004	L .002
83-10-19 1540 479	L .001	L .003	L .002	L .2	L .004	L .009	L .004	L .002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-18 1430 479	L .004	--	L .002	L .002	L .005	L .002	L .5	L .2
83-05-25 1600 479	L .004	--	L .002	L .002	L .005	L .002	L .5	L .2
83-08-16 1615 479	L .004	--	L .002	L .002	L .005	L .002	L .5	L .2
83-10-19 1540 479	L .004	--	--	--	--	L .002	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18205P IMIDAN UG/L	18215P DISULFOTON UG/L	18230P CRUFOMATE UG/L	18240P PARATHION UG/L	18245P PARATHION-METHYL UG/L	18250P MALATHION UG/L	18260P FENCHLORPHOS (RONNEL) UG/L	18270P DIAZINON UG/L
83-01-18 1430 479	L .2	L .02	L .2	L .02	L .02	L .05	L .02	L .02
83-05-25 1600 479	L .2	L .02	L .2	L .02	L .02	L .05	L .02	L .02
83-08-16 1615 479	L .2	L .02	L .2	L .02	L .02	L .05	L .02	L .02
83-10-19 1540 479	--	--	L .2	L .02	L .02	--	L .02	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18300P PHORATE UG/L	18310P ETHION UG/L	18320P CARBO-PHENOTHION UG/L	92111P URANIUM DISSOLVED U UG/L	88502P RADIUM RADIATION RA-228 BQ/L	01502P TRITIUM RADIATION H-3 BQ/L	51501P ANTIMONY RADIATION SB-125 BQ/L	55502P CESIUM RADIATION CS-137 BQ/L
83-01-18 1430 479	L .02	L .02	L .02	--	--	--	--	--
83-05-25 1600 479	L .02	L .02	L .02	--	--	--	--	--
83-08-16 1615 479	L .02	L .02	L .02	--	--	--	--	--
83-10-19 1540 479	--	--	L .02	--	--	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05AD0005 LAT 49D 8M 50S LONG. 113D 50M 20S
WATERTON RIVER AT HWY 6 BRIDGE NEAR WATERTON LAKES NATIONAL PARK, ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-19	1315	3	2.5	25.3	--	142.	8.1	8.1	.8	.5
83-02-16	1310	3	2.0	20.0	148.	156.	8.0	8.0	1.3	1.2
83-03-16	1300	3	3.0	19.7	167.	155.	7.6	8.1	2.0	1.3
83-04-13	1320	3	5.0	20.6	168.	158.	7.9	8.1	1.2	.8
83-05-26	1330	3	10.0	20.9	153	152.	7.7	8.1	6.0	3.2
83-06-15	1700	3	10.0	21.6	146.	145.	7.8	8.2	1.0	2.6
83-07-13	1300	3	14.0	22.1	151.	149.	7.9	8.3	1.2	.5
83-08-17	1330	3	16.0	20.8	157.	147.	8.2	8.4	.8	.8
83-09-28	1130	3	8.0	18.1	157.	158.	8.2	8.2	.3	.7
83-10-20	1200	3	7.0	19.6	183.	180.	8.0	8.1	3.0	1.3
83-11-09	1150	3	3.0	13.4	167.	163.	8.1	7.9	1.1	1.5
83-12-07	1115	3	1.0	5.4	154.	165.	7.8	7.8	.7	.9

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO 02 MG/L
83-01-19	1315	3	L5	2	--	.002	L2	L2	--	13.1
83-02-16	1310	3	5.	1	--	.003	L2	L2	--	12.5
83-03-16	1300	3	5.	4.	--	.004	L2	L2	--	11.4
83-04-13	1320	3	5	L1.	--	.001	L2	L2	--	11.9
83-05-26	1330	3	5.	5.	--	.001	--	2.	--	10.4
83-06-15	1700	3	5.	1.	--	L.001	6.	L2.	--	10.5
83-07-13	1300	3	L5.	2.	--	L.001	L2.	L2.	--	9.1
83-08-17	1330	3	5.	1.	--	L.001	6.	6.	--	9.1
83-09-28	1130	3	L5.	1.	--	.002	L2.	L2.	--	10.0
83-10-20	1200	3	L5.	2.	--	.004	L2	L2.	--	10.8
83-11-09	1150	3	L5.	L1. 01R	--	.005 17T	L2 02U	L2. 12U	--	12.3
83-12-07	1115	3	L5.	3.	--	L.001	L2.	L2.	--	11.9

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-19	1315	3	0.	.0	99.	81.0	22.5	8.0	89.1	.9
83-02-16	1310	3	0.	.0	99.	81.0	22.2	7.7	87.1	.6
83-03-16	1300	3	0.	.0	98.	80.0	21.1	7.5	83.6	.9
83-04-13	1320	3	0.	.0	100.	82.0	22.0	7.6	86.2	.9
83-05-26	1330	3	0.	.0	88.	72.0	19.0	7.0	76.3	.6
83-06-15	1700	3	0.	.0	84.	69.0	18.8	6.5	73.7	.8
83-07-13	1300	3	0.	0	87.	71.0	18.4	6.4	72.3	.8
83-08-17	1330	3	0.	.0	89.	73.0	18.9	7.0	76.0	.4
83-09-28	1130	3	0.	.0	101.	83.0	19.8	7.6	80.7	.7
83-10-20	1200	3	0.	.0	106.	87.0 06L	21.9	7.6	86.0	.8
83-11-09	1150	3	0.	.0	90.	74.0 06L	22.9	7.3	87.2	.7
83-12-07	1115	3	0.	0	38.	80.5 06L	22.1	7.3	85.2	.7

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-19	1315	3	.3	.2	L.05	4.	1.7	86.	--	L.001
83-02-16	1310	3	.3	.2	L.05	4.	1.8	85.	--	.001
83-03-16	1300	3	.3	.2	L.05	4.	1.8	84.	--	.001
83-04-13	1320	3	.2	.3	L.05	4.	2.0	87.	--	.001
83-05-26	1330	3	.2	.2	L.05	4.	2.6	77.	--	.002
83-06-15	1700	3	.2	.3	.06	4.	3.0	75.	--	.003
83-07-13	1300	3	.2	.4	L.05	5.	3.0	76.	--	.001
83-08-17	1330	3	.1	.2	L.05	4.	2.4	77.	--	.001
83-09-28	1130	3	.2	.4	L.05	5.	1.5	85.	--	.003
83-10-20	1200	3	.2	.4	L.05 08L	5.	1.2 02L	90.	--	.001
83-11-09	1150	3	.3	.3	--	11.	1.2 02L	88.	--	.001 04W
83-12-07	1115	3	.2	.3	L.05 08L	5.	1.0 02L	85.	--	L.001

STATION - 00AL05AD0005 LAT 49D 8M 50S LONG. 113D 50M 20S
WATERTON RIVER AT HWY 6 BRIDGE NEAR WATERTON LAKES NATIONAL PARK, ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-19	1315	3	L.003	L.003	Q.000	--	06	06	.03	.09
83-02-16	1310	3	.003	L.003	Q.000	--	06	07	L.01	Q.08
83-03-16	1300	3	.066	L.003	Q.063	--	05	06	L.01	Q.07
83-04-13	1320	3	.007	L.003	Q.004	--	07	.09	.04	.13
83-05-26	1330	3	.010	L.003	Q.007	--	11	.11	.16	.27
83-06-15	1700	3	.003	L.003	Q.000	--	14	.15	L.01	Q.16
83-07-13	1300	3	.004	L.003	Q.001	--	15	.15	L.01	Q.16
83-08-17	1330	3	.057	.003	.054	--	12	12	L.01	Q.13
83-09-28	1130	3	.004	L.003	Q.001	--	09	08	.02	.10
83-10-20	1200	3	.007	.003	.004	--	05	05	.05	.10
83-11-09	1150	3	006 06R	L.003 03V	Q.003	--	06 51V	06 51R	.05 02R	.11
83-12-07	1115	3	005	L.003	Q.002	--	06	07	L.01	Q.08

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-19	1315	3	04	L.1	.8	.24	1.0	03	L.0005	L.0005
83-02-16	1310	3	.02	L.1	.8	.20	1.0	L.02	L.0005	L.0005
83-03-16	1300	3	.04	L.1	1.0	.28	1.3	L.02	L.0005	L.0005
83-04-13	1320	3	.03	L.1	.7	26	1.0	02	L.0005	L.0005
83-05-26	1330	3	.10	L.1	.8	16	1.0	L.02	L.0005	L.0005
83-06-15	1700	3	.13	.2	1.2	05	1.3	03	L.0005	L.0005
83-07-13	1300	3	.12	L.1	.8	.04	8	.03	L.0005	L.0005
83-08-17	1330	3	.06	L.1	1.0	16	1.2	03	.0009 08D	L.0001 08D
83-09-28	1130	3	.01	L.1	.8	16	1.0	02	.0014 08D	L.0001 08D
83-10-20	1200	3	.01	L.1	.6	.32	9	L.02	.0015 08D	L.0001 08D
83-11-09	1150	3	.02 10R	L.1 06W	2.3 04R	.30 02R	2.6	.02 05V	.0012 08V	L.0001 08V
83-12-07	1115	3	.04	L.1	1.5	.06	1.6	02	.0012 08D	.0001 08D

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-19	1315	3	--	--	--	L.01	--	L.04	L.02	L.001
83-02-16	1310	3	--	--	--	L.01	--	L.04	L.02	L.001
83-03-16	1300	3	--	--	--	L.01	--	L.04	L.02	L.001
83-04-13	1320	3	--	--	--	L.01	--	L.04	L.02	L.001
83-05-26	1330	3	--	--	--	L.01	--	L.04	L.02	L.001
83-06-15	1700	3	--	--	--	L.01	--	L.04	L.02	L.001
83-07-13	1300	3	--	--	--	L.01	--	L.04	L.02	.001
83-08-17	1330	3	--	--	--	L.01	--	.06	L.02	L.001 02P
83-09-28	1130	3	--	--	--	L.01	--	L.04	L.02	L.001 02P
83-10-20	1200	3	--	--	--	L.01	--	L.04	L.02	L.001 02P
83-11-09	1150	3	--	--	--	L.02 04T	--	L.04 04T	L.02 11W	L.001 02W
83-12-07	1115	3	--	--	--	L.02	--	L.04	L.02	.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-19	1315	3	--	L.002	L.002	L.001	001	L.001	.14	L.004
83-02-16	1310	3	--	L.002	L.002	L.001	.003	L.001	.10	L.004
83-03-16	1300	3	--	L.002	L.002	.001	--	L.001	.09	L.004
83-04-13	1320	3	--	L.002	L.002	.002	.008	L.001	L.05	L.004
83-05-26	1330	3	--	L.002	L.002	L.001	.003	L.001	L.05	L.004
83-06-15	1700	3	--	L.002	.003	L.001	.001	L.001	L.05	L.004
83-07-13	1300	3	--	L.002	L.002	L.001	.002	L.001	.11	L.004
83-08-17	1330	3	--	L.001 02P	L.001 02P	L.001 05P	L.001 05P	L.001 02P	.20 01P	L.001 02P
83-09-28	1130	3	--	L.001 02P	L.001 02P	L.001 05P	.002 05P	L.001 02P	.14 01P	L.001 02P
83-10-20	1200	3	--	L.001 02P	L.001 02P	.012 05P	L.001 05P	L.001 02P	.17 01P	L.001 02P
83-11-09	1150	3	--	L.001 02W	L.001 02W	L.001 05W	L.001 05W	L.001 02W	.14 01W	L.001 02W
83-12-07	1115	3	--	L.001 02P	.001 02P	.004 05P	.001 05P	L.001 02P	.11 01P	L.001 02P

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05AD0005 LAT. 49D 8M 50S LONG. 113D 50M 20S
WATERTON RIVER AT HWY 6 BRIDGE NEAR WATERTON LAKES NATIONAL PARK, ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-19	1315	3	L.001	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-02-16	1310	3	.001	L.001	.005	L.001	L.001	L.002	L.001	L.001
83-03-16	1300	3	L.001	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-04-13	1320	3	L.001	--	--	--	--	--	--	--
83-05-26	1330	3	.004	L.001	001	L.001	L.001	L.002	L.001	L.001
83-06-15	1700	3	.007	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-07-13	1300	3	.001	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-08-17	1330	3	.001	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-09-28	1130	3	.004	--	--	--	--	--	--	--
83-10-20	1200	3	.023	--	--	--	--	--	--	--
83-11-09	1150	3	.001 35W	--	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-19	1315	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-02-16	1310	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-16	1300	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-26	1330	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-15	1700	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-13	1300	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-17	1330	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-19	1315	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-02-16	1310	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-16	1300	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-04-13	1320	3	--	--	--	L.2	L.004	L.009	L.004	L.002
83-05-26	1330	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-06-15	1700	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-07-13	1300	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-17	1330	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-19	1315	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-02-16	1310	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-16	1300	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-13	1320	3	L.004	L.2	--	--	--	--	--	--
83-05-26	1330	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-15	1700	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-13	1300	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-17	1330	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00AL05AD0050
BELLY RIVER AT HWY 6, WATERTON LAKES NATIONAL PARK, ALBERTA LAT. 49D 3M 6S LONG. 113D 41M 7S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-19	1215	3	1.0	18.6	208.	203.	8.4	8.0	.8	.5
83-02-16	1215	3	2.5	19.1	196.	202.	8.1	7.9	1.2	.9
83-03-16	1200	3	2.0	20.0	195.	193.	7.9	8.1	1.0	1.0
83-04-13	1215	3	5.0	20.5	241.	226.	7.9	8.0	1.4	1.0
83-05-26	1230	3	9.0	20.7	148.	147.	--	8.0	40.0	28.0
83-06-15	1545	3	10.0	21.8	152.	149.	7.7	8.1	4.0	3.0
83-07-13	1145	3	12.0	22.0	160.	154.	7.8	8.2	2.0	1.0
83-08-17	1230	3	14.0	20.4	167.	159.	8.0	8.1	1.5	1.0
83-09-28	1030	3	4.5	17.6	190.	195.	8.3	8.1	.3	.6
83-10-20	1045	3	5.0	19.3	199.	199.	7.9	8.1	1.0	1.0
83-11-09	1040	3	2.5	13.8	170.	169.	8.0	7.9	.5	.9
83-12-07	1030	3	2.0	5.3	221.	228.	7.8	7.9	.9	.5

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-19	1215	3	L5	L1.	--	L.001	L2	L2	--	13.1
83-02-16	1215	3	5	1.	--	.001	L2	L2	--	12.1
83-03-16	1200	3	5	1.	--	L.001	L2	L2	--	11.7
83-04-13	1215	3	5	L1.	--	L.001	L2	L2	--	11.9
83-05-26	1230	3	5	59.	--	.002	--	30.	--	10.0
83-06-15	1545	3	5	3.	--	.002	L2	L2	--	9.9
83-07-13	1145	3	5	2.	--	.001	L2	L2	--	9.3
83-08-17	1230	3	5	1.	--	.001	4.	2.	--	9.1
83-09-28	1030	3	L5	1.	--	.001	6.	6.	--	10.7
83-10-20	1045	3	L5	L1.	--	L.001	L2	L2	--	11.0
83-11-09	1040	3	L5	L1.	--	.001	2.	L2	--	12.5
83-12-07	1030	3	L5	4.	--	L.001	4.	L2	--	10.5

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-19	1215	3	0.	.0	128.	105.0	27.0	11.6	115.2	1.1
83-02-16	1215	3	0.	0	128.	105.0	26.4	11.2	112.0	1.1
83-03-16	1200	3	0.	.0	122.	100.0	25.0	10.5	105.7	1.3
83-04-13	1215	3	0.	.0	146.	120.0	29.4	12.8	126.1	1.9
83-05-26	1230	3	0.	0	85	70.0	17.5	7.5	74.6	.7
83-06-15	1545	3	0	0	87.	71.0	18.0	7.5	75.8	.8
83-07-13	1145	3	0.	.0	90.	74.0	18.4	7.5	76.8	1.1
83-08-17	1230	3	0	.0	95.	78.0	19.8	8.0	82.4	.9
83-09-28	1030	3	0.	.0	119.	98.0	23.2	9.4	96.6	1.2
83-10-20	1045	3	0.	.0	121.	99.0 06L	23.9	9.9	100.4	1.1
83-11-09	1040	3	0.	.0	100.	82.0 06L	22.1	8.4	89.8	.9
83-12-07	1030	3	0.	.0	140.	115.0 06L	29.2	11.6	120.7	1.4

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-19	1215	3	.3	.2	L.05	7.	3.3	113.	--	--
83-02-16	1215	3	.3	.2	L.05	6.	3.2	112.	--	--
83-03-16	1200	3	.3	.2	L.05	7.	3.0	107.	--	--
83-04-13	1215	3	.3	.4	L.05	10.	3.6	130.	--	--
83-05-26	1230	3	.2	.2	L.05	4.	3.0	75.	--	--
83-06-15	1545	3	.2	.3	L.05	4.	3.0	76.	--	--
83-07-13	1145	3	.2	.4	L.05	4.	3.0	79.	--	--
83-08-17	1230	3	.1	.2	L.05	4.	2.4	82.	--	--
83-09-28	1030	3	.3	.3	L.05	8.	3.0	104.	--	--
83-10-20	1045	3	.3	.4	L.05 08L	6.	3.1 02L	104.	--	--
83-11-09	1040	3	.2	.3	--	6.	2.4 02L	90.	--	--
83-12-07	1030	3	.3	.4	.06 08L	9.	3.3 02L	125.	--	--

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05AD0060 LAT. 49D 3M 6S LONG. 113D 41M 7S
BELLY RIVER AT HWY 6, WATERTON LAKES NATIONAL PARK, ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-19	1215	3	L. 002	L. 003	Q. 000	--	. 10	. 14	L. 01	Q. 15
83-02-16	1215	3	. 004	. 003	. 001	--	. 09	. 10	. 28	. 38
83-03-16	1200	3	. 075	L. 003	Q. 072	--	. 09	. 09	L. 01	Q. 10
83-04-13	1215	3	. 003	L. 003	Q. 000	--	. 09	. 11	L. 01	Q. 12
83-05-28	1230	3	. 058	L. 003	Q. 055	--	. 12	. 12	. 11	. 23
83-06-15	1545	3	. 004	L. 003	Q. 001	--	. 13	. 15	L. 01	Q. 16
83-07-13	1145	3	. 004	L. 003	Q. 001	--	. 13	. 13	L. 01	Q. 14
83-08-17	1230	3	. 003	L. 003	Q. 000	--	. 12	. 12	03	. 15
83-09-28	1030	3	004	L. 003	Q. 001	--	. 12	. 12	L. 01	Q. 13
83-10-20	1045	3	004	. 003	. 001	--	. 11	. 11	L. 01	Q. 12
83-11-09	1040	3	L. 003	L. 003	Q. 000	--	. 09	. 10	L. 01	Q. 11
83-12-07	1030	3	L. 003	. 007	Q. 004	--	. 10	. 11	L. 01	Q. 12

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-19	1215	3	. 07	L. 1	. 7	. 07	. 8	. 03	L. 0005	L. 0005
83-02-16	1215	3	. 08	L. 1	. 8	. 37	1. 2	. 02	L. 0005	L. 0005
83-03-16	1200	3	. 09	L. 1	. 8	. 06	. 9	L. 02	L. 0005	L. 0005
83-04-13	1215	3	. 09	L. 1	. 7	. 13	. 8	. 03	L. 0005	L. 0005
83-05-28	1230	3	. 11	L. 1	. 9	1. 40	2. 3	. 02	L 0005	L. 0005
83-06-15	1545	3	. 13	L. 1	. 7	. 08	. 8	. 03	0005	L. 0005
83-07-13	1145	3	. 12	L. 1	. 5	. 08	. 6	. 03	L. 0005	L. 0005
83-08-17	1230	3	. 07	L. 1	. 6	. 24	. 8	. 03	. 0013 08D	L. 0001 08D
83-09-28	1030	3	. 08	L. 1	. 5	. 08	. 6	. 03	. 0011 08D	. 0002 08D
83-10-20	1045	3	. 07	L. 1	. 5	. 06	. 6	. 02	. 0012 08D	L. 0001 08D
83-11-09	1040	3	. 02	L. 1	1. 8	. 12	1. 9	. 02	. 0013 08D	. 0002 08D
83-12-07	1030	3	. 10	L. 1	. 8	. 02	. 8	. 03	. 0008 08D	. 0002 08D

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-19	1215	3	--	--	--	L. 01	--	L. 04	L. 02	--
83-02-16	1215	3	--	--	--	L. 01	--	L. 04	L. 02	--
83-03-16	1200	3	--	--	--	L. 01	--	L. 04	L. 02	--
83-04-13	1215	3	--	--	--	L. 01	--	L. 04	L. 02	--
83-05-28	1230	3	--	--	--	L. 01	--	L. 04	L. 02	--
83-06-15	1545	3	--	--	--	L. 01	--	L. 04	L. 02	--
83-07-13	1145	3	--	--	--	L. 01	--	L. 04	L. 02	--
83-08-17	1230	3	--	--	--	L. 01	--	L. 04	L. 02	--
83-09-28	1030	3	--	--	--	L. 01	--	L. 04	L. 02	--
83-10-20	1045	3	--	--	--	L. 01	--	L. 04	L. 02	--
83-11-09	1040	3	--	--	--	L. 02	--	L. 04	L. 02	--
83-12-07	1030	3	--	--	--	L. 02	--	L. 04	L. 02	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00AL05AE0001 LAT. 49D 0M 10S LONG. 113D 18M 50S
ST. MARY RIVER NEAR INTERNATIONAL BOUNDARY (FORMERLY NEAR KIMBALL). ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C	02061L TEMP. WATER DEG. C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-19	1000	3	.0	18.6	211.	195.	8.2	8.0	1.0	.6
83-02-16	1000	3	1.5	18.7	178.	198.	8.2	8.0	1.8	1.4
83-03-16	1000	3	2.0	20.4	238.	230.	--	8.2	1.8	1.7
83-04-13	1000	3	3.5	18.0	248.	242.	8.0	8.2	.8	1.0
83-05-26	1010	3	10.0	20.9	156.	164.	7.8	8.1	90.0	54.0
83-06-15	1400	3	14.0	21.7	157.	152.	7.9	8.3	4.0	3.5
83-07-13	0930	3	14.0	22.4	--	150.	7.9	8.2	8.0	4.7
83-08-17	1000	3	15.0	20.7	152.	152.	7.9	8.1	4.2	2.4
83-09-28	0830	3	4.5	18.2	177.	180.	8.4	8.1	1.5	1.4
83-10-20	0830	3	5.0	18.5	199.	191.	7.9	8.1	1.1	--
83-11-09	0830	3	1.0	9.3	164.	166.	8.1	7.7	3.0	2.9
83-12-07	0900	3	1.0	5.4	186.	188.	7.9	7.7	1.5	.7

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-19	1000	3	L5.	2	--	L .001	28.	24.	--	13.1
83-02-16	1000	3	5.	L1	--	.001	--	50.	--	12.5
83-03-16	1000	3	10.	L1.	--	L .001	68.	66.	--	11.7
83-04-13	1000	3	5.	L1	--	L .001	L2	L2	--	12.7
83-05-26	1010	3	5.	139.	--	.003	150.	110.	--	9.6
83-06-15	1400	3	5.	7.	--	L .001	4.	4.	--	9.2
83-07-13	0930	3	10.	13.	--	.001	60.	24.	--	8.8
83-08-17	1000	3	5.	2.	--	.001	--	50.	--	8.9
83-09-28	0830	3	L5.	1.	--	L .001	46.	46.	--	10.9
83-10-20	0830	3	L5.	1.	--	.001	33.	12.	--	10.9
83-11-09	0830	3	L5.	2.	--	.001	--	10.	--	13.1
83-12-07	0900	3	L5.	L1.	--	L .001	4.	2.	--	12.1

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-19	1000	3	0.	.0	128.	105.0	27.7	10.0	110.3	1.9
83-02-16	1000	3	0.	.0	128.	105.0	27.0	9.7	107.4	2.2
83-03-16	1000	3	0.	.0	146.	120.0	30.3	11.5	123.0	4.4
83-04-13	1000	3	0.	.0	152.	125.0	31.8	12.0	128.8	3.7
83-05-26	1010	3	0.	.0	94.	77.0	20.0	7.7	81.6	1.2
83-06-15	1400	3	0.	.0	89.	73.0	19.7	6.7	76.8	1.2
83-07-13	0930	3	0.	.0	87.	71.0	18.4	6.5	72.7	1.3
83-08-17	1000	3	0.	.0	90.	74.0	19.3	6.8	76.2	.7
83-09-28	0830	3	0.	.0	110.	90.0	23.9	8.1	93.0	1.6
83-10-20	0830	3	0.	.0	118.	97.0 05L	24.8	8.6	97.3	2.0
83-11-09	0830	3	0.	.0	99.	81.0 05L	22.7	7.3	86.7	1.3
83-12-07	0900	3	0.	.0	118.	96.7 05L	26.5	8.6	101.6	1.7

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-19	1000	3	.4	.4	L .05	7.	3.0	113.	--	.002
83-02-16	1000	3	.5	.4	L .05	7.	3.0	113.	--	.001
83-03-16	1000	3	.7	.6	L .05	10.	3.2	133.	--	L .001
83-04-13	1000	3	.5	.6	L .05	10.	3.2	137.	--	.001
83-05-26	1010	3	.3	.3	L .05	6.	3.0	85.	--	.002
83-06-15	1400	3	.2	.3	.10	4.	2.6	79.	--	.002
83-07-13	0930	3	.3	.4	L .05	5.	2.6	77.	--	L .001
83-08-17	1000	3	.2	.3	L .05	4.	2.0	77.	--	.002
83-09-28	0830	3	.3	.3	L .05	5.	2.6	96.	--	.002
83-10-20	0830	3	.4	.4	L .05 08L	6.	2.9 02L	104.	--	.001
83-11-09	0830	3	.3	.3	--	6.	2.5 02L	89.	--	.001
83-12-07	0900	3	.3	.4	--	7.	2.8 02L	105.	--	L .001

STATION - 00AL05AE0001 LAT. 49D 0M 10S LONG. 113D 18M 50S
ST. MARY RIVER NEAR INTERNATIONAL BOUNDARY (FORMERLY NEAR KIMBALL). ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-19	1000	3	L.003	L.003	Q.000	--	.08	.09	L.01	Q.10
83-02-16	1000	3	.004	.003	.001	--	.10	.10	L.01	Q.11
83-03-16	1000	3	.071	L.003	Q.068	--	.13	.10	L.01	Q.11
83-04-13	1000	3	.013	L.003	Q.010	--	.09	.11	L.01	Q.12
83-05-26	1010	3	.110	L.003	Q.107	--	.09	.09	.15	.24
83-06-15	1400	3	.006	L.003	Q.003	--	.08	.09	L.01	Q.10
83-07-13	0930	3	.010	L.003	Q.007	--	.10	.11	.02	13
83-08-17	1000	3	027	.007	.020	--	.08	.09	.04	13
83-09-28	0830	3	.005	L.003	Q.002	--	.08	.09	L.01	Q.10
83-10-20	0830	3	.003	.003	.000	--	--	.06	L.01	Q.07
83-11-09	0830	3	.007	L.003	Q.004	--	.06	.06	.02	08
83-12-07	0900	3	L.003	L.003	Q.000	--	.06	.06	L.01	Q.07

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-19	1000	3	.05	L.1	1.0	.10	1.1	.02	L.0005	L.0005
83-02-16	1000	3	.03	L.1	1.2	.18	1.4	.02	L.0005	L.0005
83-03-16	1000	3	.03	L.1	1.4	.14	1.5	L.02	L.0005	L.0005
83-04-13	1000	3	.05	L.1	1.2	.11	1.3	.03	L.0005	L.0005
83-05-26	1010	3	.06	L.1	1.0	1.70	2.7	.02	L.0005	L.0005
83-06-15	1400	3	.06	L.1	.8	.12	.9	.02	L.0005	L.0005
83-07-13	0930	3	.07	L.1	.9	.20	1.1	.03	L.0005	L.0005
83-08-17	1000	3	.04	L.1	.9	.29	1.2	L.02	.0008 08D	L.0001 08D
83-09-28	0830	3	.03	L.1	.8	.12	.9	.03	.0006 08D	.0003 08D
83-10-20	0830	3	.02	L.1	1.3	.15	1.5	.03	.0016 08D	.0001 08D
83-11-09	0830	3	.02	L.1	2.3	.23	2.5	.02	.0012 08D	.0001 08D
83-12-07	0900	3	.04	L.1	.9	L.01	Q.9	.02	.0010 08D	.0001 08D

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-19	1000	3	--	--	--	L.01	--	L.04	L.02	L.001
83-02-16	1000	3	--	--	--	L.01	--	L.04	L.02	L.001
83-03-16	1000	3	--	--	--	L.01	--	L.04	L.02	L.001
83-04-13	1000	3	--	--	--	L.01	--	L.04	L.02	L.001
83-05-26	1010	3	--	--	--	L.01	--	L.04	.03	.006
83-06-15	1400	3	--	--	--	L.01	--	L.04	L.02	L.001
83-07-13	0930	3	--	--	--	L.01	--	L.04	L.02	.001
83-08-17	1000	3	--	--	--	L.01	--	.04	L.02	L.001 02P
83-09-28	0830	3	--	--	--	L.01	--	L.04	L.02	.001 02P
83-10-20	0830	3	--	--	--	L.01	--	.09	L.02	L.001 02P
83-11-09	0830	3	--	--	--	L.02	--	L.04	L.02	L.001 02P
83-12-07	0900	3	--	--	--	L.02	--	L.04	L.02	L.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-19	1000	3	--	L.002	L.002	L.001	.003	L.001	.11	L.004
83-02-16	1000	3	--	L.002	L.002	L.001	.003	L.001	.11	L.004
83-03-16	1000	3	--	L.002	L.002	.002	--	L.001	.13	L.004
83-04-13	1000	3	--	L.002	.002	.001	--	L.001	L.05	L.004
83-05-26	1010	3	--	.002	.005	.004	.017	L.001	.07	.004
83-06-15	1400	3	--	L.002	L.002	L.001	.002	L.001	.06	L.004
83-07-13	0930	3	--	L.002	L.002	L.001	.002	L.001	.12	L.004
83-08-17	1000	3	--	L.001 02P	L.001 02P	L.001 05P	.001 05P	L.001 02P	.10 01P	L.001 02P
83-09-28	0830	3	--	L.001 02P	001 02P	L.001 05P	.001 05P	L.001 02P	.13 01P	L.001 02P
83-10-20	0830	3	--	L.001 02P	.001 02P	.002 05P	.024 05P	L.001 02P	.23 01P	L.001 02P
83-11-09	0830	3	--	L.001 02P	L.001 02P	L.001 05P	L.001 05P	L.001 02P	.15 01P	L.001 02P
83-12-07	0900	3	--	L.001 02P	L.001 02P	.003 05P	.002 05P	L.001 02P	.11 01P	L.001 02P

STATION - 00AL05AE0001 LAT. 49D 0M 10S LONG. 113D 18M 50S
ST. MARY RIVER NEAR INTERNATIONAL BOUNDARY (FORMERLY NEAR KIMBALL), ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-19	1000	3	L.001	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-02-16	1000	3	.001	L.001	.004	L.001	L.001	L.002	L.001	L.001
83-03-16	1000	3	.001	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-04-13	1000	3	.002	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-05-26	1010	3	.002	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-06-15	1400	3	.002	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-07-13	0930	3	L.001	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-08-17	1000	3	.002	L.001	.004	L.001	L.001	L.002	L.001	L.001
83-09-28	0830	3	L.001	--	--	--	--	--	--	--
83-10-20	0830	3	L.001	--	--	--	--	--	--	--
83-11-09	0830	3	.002	--	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-19	1000	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-02-16	1000	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-16	1000	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-13	1000	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-26	1010	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-15	1400	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-13	0930	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-17	1000	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-19	1000	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-02-16	1000	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-16	1000	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-04-13	1000	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-26	1010	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-06-15	1400	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-07-13	0930	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-17	1000	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENUPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-19	1000	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-02-16	1000	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-16	1000	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-13	1000	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-26	1010	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-15	1400	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-13	0930	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-17	1000	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05AG0001
OLDMAN RIVER AT HWY 36 NORTH OF TABER, ALBERTA

LAT. 49D 57M 38S LONG. 112D 8M 3S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-17	1110	479	.5	21.5	401.	380.	8.5	8.2	4.0	1.6
83-02-14	1130	479	1.5	16.0	393.	401.	8.4	8.2	3.5	2.0
83-03-14	1145	479	3.5	21.1	332.	329.	8.4	8.3	32.0	20.0
83-04-11	1215	479	5.0	18.7	439.	420.	8.5	8.3	5.0	3.2
83-05-24	1215	479	16.0	22.6	305.	300.	7.9	8.0	112.0	80.0
83-06-14	0930	479	17.5	19.3	255.	252.	8.3	8.5	38.0	31.0
83-07-11	1130	479	19.0	22.8	333.	328.	8.8	8.8	25.0	20.0
83-08-15	1215	479	20.0	17.0	398.	374.	8.5	8.7	6.0	3.5
83-09-26	1100	479	13.0	16.3	474.	460.	8.8	8.8	12.0	20.0
83-10-18	1200	479	7.0	19.9	466.	449	8.4	8.4	10.0	4.6
83-11-07	1100	479	3.5	12.2	415.	412.	8.6	8.4	8.9	5.0
83-12-05	1300	479	.5	6.6	440.	444	7.5	7.6	2.0	1.1

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED OO 02 MG/L
83-01-17	1110	479	L5.	3.	--	.004	70.	14.	63.	15.6
83-02-14	1130	479	10.	2.	--	.006	10.	7.	900.	13.4
83-03-14	1145	479	20.	38.	--	.020	L2.	L2.	500.	12.4
83-04-11	1215	479	10.	6.	--	.050	10.	10.	40.	13.1
83-05-24	1215	479	10.	171.	--	.010	--	20.	130.	8.6
83-06-14	0930	479	5.	37.	--	.003	--	7.	80.	9.1
83-07-11	1130	479	30.	23.	--	.010	140.	42.	65.	9.1
83-08-15	1215	479	20.	4.	--	.004	--	27.	40.	9.8
83-09-26	1100	479	5.	21.	--	.004	1000.	24.	--	10.7
83-10-18	1200	479	5.	6.	--	.008	80.	10.	62.	11.1
83-11-07	1100	479	10.	21.	--	.005	160.	50.	1100.	13.7
83-12-05	1300	479	5.	4. 01R	--	.001 17T	2120. 02U	860. 12U	220. 03U	9.1

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-17	1110	479	0.	.0	183.	150.0	45.4	16.4	180.9	16.0
83-02-14	1130	479	0.	.0	189.	155.0	44.6	16.1	177.6	18.0
83-03-14	1145	479	0.	.0	152.	125.0	36.0	13.6	145.9	18.0
83-04-11	1215	479	0.	.0	195.	160.0	45.0	18.2	187.3	23.0
83-05-24	1215	479	0.	.0	152.	125.0	35.2	12.1	137.7	7.8
83-06-14	0930	479	2.	1.7	130.	110.0	31.1	10.2	119.7	5.9
83-07-11	1130	479	8.	7.0	129.	120.0	33.0	14.2	140.9	14.0
83-08-15	1215	479	5.	4.0	137.	120.0	32.1	16.7	148.9	23.0
83-09-26	1100	479	8.	6.9	160.	145.0	37.2	18.8	170.3	34.0
83-10-18	1200	479	3.	2.8	182.	155.0 06L	44.1	18.8	187.5	25.0
83-11-07	1100	479	1.	.9	195.	162.0 06L	44.4	16.5	178.8	20.8
83-12-05	1300	479	0.	.0	222.	182.1 06L	46.8	18.1	191.4	19.9

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-17	1110	479	1.4	4.9	.10	51.	.8	226.	--	--
83-02-14	1130	479	1.6	6.4	.11	50.	L.1	0232.	--	--
83-03-14	1145	479	1.3	4.0	.07	50.	.1	198.	--	--
83-04-11	1215	479	1.5	6.9	.11	68.	.2	259.	--	--
83-05-24	1215	479	1.0	2.0	.09	28.	3.2	164.	--	--
83-06-14	0930	479	.7	1.3	.21	22.	2.2	139.	--	--
83-07-11	1130	479	1.5	4.5	.13	38.	.5	178.	--	--
83-08-15	1215	479	2.0	7.5	.15	64.	.2	218.	--	--
83-09-26	1100	479	2.5	11.0	.12	85.	.4	276.	--	--
83-10-18	1200	479	1.6	6.5	.16 08L	72.	.4 02L	261.	--	--
83-11-07	1100	479	1.7	5.6	.14 08L	60.	.6 02L	246.	--	--
83-12-05	1300	479	2.0	5.6	.13 08L	61.	.6 02L	263,	--	--

STATION - 00AL05AG0001
OLDMAN RIVER AT HWY 36 NORTH OF TABER, ALBERTA

LAT. 49D 57M 38S LONG. 112D 5M 35S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-17	1110	479	.076	.072	.004	--	.34	.33	.04	.37
83-02-14	1130	479	.150	.130	.020	--	.38	.35	.09	.44
83-03-14	1145	479	.140	.039	.101	--	.17	.18	.33	.51
83-04-11	1215	479	.110	.076	.034	--	.17	.17	.13	.30
83-05-24	1215	479	.240	.022	.218	--	.11	.11	.45	.56
83-06-14	0930	479	.062	.015	.047	--	.10	.13	.11	.24
83-07-11	1130	479	.066	.029	.037	--	.14	.14	.11	.25
83-08-15	1215	479	.025	.011	.014	--	.21	.21	.09	.30
83-09-26	1100	479	.100	.058	.042	--	.25	.24	.16	.40
83-10-18	1200	479	.110	.089	.021	--	.24	.20	.10	.30
83-11-07	1100	479	.110	.092	.018	--	.20	.19	.17	.36
83-12-05	1300	479	.027 06R	.009 03V	.018	--	.37 51V	.37 51R	L.01 02R	.38

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-17	1110	479	.21	.1	1.6	.29	1.9	.04	L.0005	.0006
83-02-14	1130	479	.25	L.1	1.6	47	2.1	.02	L.0005	0007
83-03-14	1145	479	09	L.1	1.6	2.00	3.6	L.02	L.0005	0005
83-04-11	1215	479	L.01	L.1	2.3	.61	2.9	.04	.0005	L.0005
83-05-24	1215	479	.03	L.1	2.2	3.90	6.1	.05	.0005	L.0005
83-06-14	0930	479	L.01	L.1	1.8	.71	2.5	.03	L.0005	L.0005
83-07-11	1130	479	L.01	L.1	2.4	.70	3.1	.03	.0010	0005
83-08-15	1215	479	L.01	L.1	2.6	.51	3.1	.04	.0017 08D	.0004 08D
83-09-26	1100	479	L.01	L.1	2.9	1.00	3.9	.05	.0021 08D	.0005 08D
83-10-18	1200	479	.01	.1	2.0	.51	2.5	.04	.0024 08D	.0006 08D
83-11-07	1100	479	.03	.3	1.7	.95	2.7	.08	.0008 08D	.0006 08D
83-12-05	1300	479	.22 10R	.1 06W	2.1 04R	.12 02R	2.2	.06 05V	.0021 08V	.0006 08V

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-17	1110	479	--	L.004	--	L.01	--	L.04	L.02	L.001
83-02-14	1130	479	--	--	--	L.01	--	L.04	L.02	--
83-03-14	1145	479	--	--	--	L.01	--	L.04	L.02	--
83-04-11	1215	479	--	--	--	L.01	--	L.04	L.02	--
83-05-24	1215	479	--	L.004	--	L.01	--	L.04	L.02	.005
83-06-14	0930	479	--	--	--	L.01	--	L.04	L.02	--
83-07-11	1130	479	--	--	--	L.01	--	L.04	L.02	--
83-08-15	1215	479	--	L.005	--	L.01	--	L.04	L.02	.002 02P
83-09-26	1100	479	--	--	--	L.01	--	.04	L.02	--
83-10-18	1200	479	--	L.005	--	L.01	--	L.04	.03	.001 02P
83-11-07	1100	479	--	--	--	L.02	--	L.04	L.02	--
83-12-05	1300	479	--	--	--	L.02 04T	--	L.04 04T	L.02 11W	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-17	1110	479	--	L.002	L.002	.001	L.001	L.001	.12	L.004
83-05-24	1215	479	--	L.002	.005	.008	.016	.003	.15	.029
83-08-15	1215	479	--	L.001 02P	.002 02P	.001 05P	.001 05P	L.001 02P	.10 01P	L.001 02P
83-10-18	1200	479	--	L.001 02P	.002 02P	.002 05P	L.001 05P	.001 02P	.16 01P	.002 02P

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05AG0001
OLDMAN RIVER AT HWY 36 NORTH OF TABER, ALBERTA

LAT. 49D 57M 38S LONG. 112D 9M 3S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-17	1110	479	.003	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-02-14	1130	479	.001	--	--	--	--	--	--	--
83-03-14	1145	479	.002	--	--	--	--	--	--	--
83-04-11	1215	479	.002	--	--	--	--	--	--	--
83-05-24	1215	479	.008	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-06-14	0930	479	.002	--	--	--	--	--	--	--
83-07-11	1130	479	004	--	--	--	--	--	--	--
83-08-15	1215	479	.007	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-09-26	1100	479	.013	--	--	--	--	--	--	--
83-10-18	1200	479	.001	L.001	.010	.002	L.001	L.002	L.001	L.001
83-11-07	1100	479	.002	--	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-17	1110	479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-24	1215	479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-15	1215	479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-18	1200	479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-17	1110	479	L.001	L.003	L.002	L.2	.010	L.009	L.004	L.002
83-05-24	1215	479	L.001	L.003	L.002	L.2	.008	L.009	L.004	L.002
83-08-15	1215	479	L.001	L.003	L.002	L.2	.300	L.009	L.004	L.002
83-10-18	1200	479	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-17	1110	479	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-05-24	1215	479	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-08-15	1215	479	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-10-18	1200	479	L.004	--	--	--	--	L.002	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18205P IMIDAN UG/L	18215P DISULFOTON UG/L	18230P CRUFOMATE UG/L	18240P PARATHION UG/L	18245P PARATHION-METHYL UG/L	18250P MALATHION UG/L	18260P FENCHLORPHOS (RONNEL) UG/L	18270P DIAZINON UG/L
83-01-17	1110	479	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-05-24	1215	479	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-08-15	1215	479	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-10-18	1200	479	--	--	L.2	L.02	L.02	--	L.02	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18300P PHORATE UG/L	18310P ETHION UG/L	18320P CARBO-PHENOTHION UG/L	92111P URANIUM DISSOLVED U UG/L	88502P RADIUM RADIATION RA-226 BQ/L	01502P TRITIUM RADIATION H-3 BQ/L	51501P ANTIMONY RADIATION SB-125 BQ/L	55502P CESIUM RADIATION CS-137 BQ/L
83-01-17	1110	479	L.02	L.02	L.02	--	--	--	--	--
83-05-24	1215	479	L.02	L.02	L.02	--	--	--	--	--
83-08-15	1215	479	L.02	L.02	L.02	--	--	--	--	--
83-10-18	1200	479	--	--	L.02	--	--	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00AL05AK0001
SOUTH SASKATCHEWAN RIVER AT HWY 41, ALBERTA LAT. 500 44M 15S LONG. 1100 5M 44S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG C	02061L TEMP. WATER DEG C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-18 0910 462	0	22.2	413.	400	7.9	7.9	5.6	6.2
83-02-22 0930 462	.4	22.0	372	373.	7.9	7.9	9.8	11.0
83-03-15 0900 462	5	19.9	358.	342	8.4	8.4	17.0	16.0
83-04-19 0820 462	11.5	17.8	388.	375	8.7	8.5	19.0	5.6
83-05-17 0845 462	11.0	20.4	376	366	8.7	8.2	14.0	4.4
83-06-07 0840 462	15.0	21.5	325.	299.	8.0	8.1	120.0	96.0
83-07-12 0900 462	19.5	10.4	320	332	8.6	8.7	21.0	5.6
83-08-17 0840 462	21.0	22.7	417	374	8.8	8.7	13.0	6.5
83-09-13 1000 462	12.0	19.4	416	387	8.5	8.6	5.2	3.5
83-10-11 0908 462	6.0	17.3	498	474	8.4	8.4	12.0	5.9
83-11-08 1145 462	4.0	18.4	495	491	8.4	8.2	16.0	7.2
83-12-13 0910 462	.4	13.3	550	547	8.1	7.9	3.3	3.0

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	05717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-18 0910 462	L5.	9	6.	.001	260.	20	--	13.1
83-02-22 0930 462	20	19.	16.	.008	520	2.	--	11.8
83-03-15 0900 462	20.	41.	37.	.010	--	190.	--	13.7
83-04-19 0820 462	20	11	9.	.020	L5	L5.	--	11.7
83-05-17 0845 462	10.	14	10.	.010	L2.	L2.	--	9.5
83-06-07 0840 462	10	208.	196.	020	46	30	--	8.4
83-07-12 0900 462	10	25	21.	010	30	8.	--	8.6
83-08-17 0840 462	10	12.	9.	.001	140	68.	--	8.1
83-09-13 1000 462	10	1	L1.	006	6.	L2.	--	10.6
83-10-11 0908 462	10	11.	6.	.001	30.	6.	--	10.7
83-11-08 1145 462	10	12	10.	010	L2	L2.	--	12.2
83-12-13 0910 462	L5.	2	1	L.001	16	L2.	--	12.4

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-18 0910 462	0	.0	183	150.0	49.9	16.1	190.9	12.0
83-02-22 0930 462	0	0	158.	130.0	44.9	14.3	171.0	14.0
83-03-15 0900 462	0	.4	145.	120.0	39.0	12.9	150.5	17.0
83-04-19 0820 462	5	4.4	136.	120.0	36.9	16.9	181.7	21.0
83-05-17 0845 462	0	.0	145	120.0	36.2	16.0	156.3	14.0
83-06-07 0840 462	0	.0	140	115.0	36.2	11.3	136.9	7.6
83-07-12 0900 462	2.	1.8	136.	115.0	35.5	14.0	146.3	11.0
83-08-17 0840 462	8	6.7	118.	110.0	28.0	18.5	146.1	22.0
83-09-13 1000 462	4	3.0	133.	115.0	30.0	18.6	151.5	25.0
83-10-11 0908 462	2.	1.9	166.	140.0	28.9	21.3	159.9	31.0
83-11-08 1145 462	0	.0	202.	166.0 06L	46.9	20.8	202.7	29.3
83-12-13 0910 462	0.	0	246.	202.0 06L	64.4	21.7	250.1	27.3

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-18 0910 462	1.5	5.9	.13	55.	2.5	233.	--	.004
83-02-22 0930 462	2.6	5.4	.15	54.	1.6	216.	--	.005
83-03-15 0900 462	1.4	10.0	.07	52.	L.1	Q204.	--	.003
83-04-19 0820 462	1.7	8.6	.08	58.	L.1	Q225.	--	.003
83-05-17 0845 462	1.4	5.2	.12	54.	L.1	Q199.	--	.001
83-06-07 0840 462	1.1	2.3	.14	34.	3.4	185.	--	.004
83-07-12 0900 462	1.3	3.3	.18	45.	.6	180.	--	.002
83-08-17 0840 462	2.1	5.5	.16	72.	L.1	Q214.	--	.003
83-09-13 1000 462	2.2	6.6	.15	76.	.2	228.	--	.002
83-10-11 0908 462	2.7	8.4	.12	91.	.4	268.	--	.002
83-11-08 1145 462	2.4	6.9	.17 08L	90.	.5 02L	296.	--	.002
83-12-13 0910 462	2.4	15.8	.18 08L	89.	1.0 02L	343.	--	.004

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05AK0001
SOUTH SASKATCHEWAN RIVER AT HWY 41, ALBERTA

LAT. 500 44M 15S LONG. 1100 5M 44S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-18	0910	462	.065	.053	.012	.049	1.00	1.00	.06	1.05
83-02-22	0930	462	.100	.067	.033	.057	1.30	1.30	.12	1.42
83-03-15	0900	462	.110	.010	.100	.003	.91	.91	.16	1.07
83-04-15	0820	462	.041	.008	.033	L.003	.46	.49	.29	.78
83-05-17	0845	462	.042	.009	.033	L.003	.17	.15	.11	.26
83-06-07	0840	462	.240	.017	.223	L.003	.35	.36	.47	.83
83-07-12	0900	462	.043	.003	.040	L.003	.14	.14	.12	.26
83-08-17	0840	462	.025	.011	.014	L.003	.30	.30	.07	.37
83-09-13	1000	462	.012	.003	.009	L.003	.29	.29	.04	.33
83-10-11	0908	462	.023	.009	.014	L.003	.30	.29	.03	.32
83-11-08	1145	462	.035	.006	.029	L.003	.19	.21	.14	.35
83-12-13	0910	462	.011	.006	.005	L.003	1.40	1.40	L.01	Q1.41

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-18	0910	462	.82	.5	1.9	.37	2.3	.08	L.0005	L.0005
83-02-22	0930	462	1.20	.3	2.8	.86	3.7	.06	0005	L.0005
83-03-15	0900	462	.90	L.1	1.6	1.40	3.0	.09	L.0005	L.0005
83-04-19	0820	462	.33	L.1	2.2	1.90	4.1	.04	L.0005	L.0005
83-05-17	0845	462	L.01	L.1	2.9	.76	3.7	.04	L.0005	L.0005
83-06-07	0840	462	.22	L.1	2.2	6.30	8.5	.02	L.0005	L.0005
83-07-12	0900	462	.01	L.1	2.1	.74	2.8	.03	.0007	L.0005
83-08-17	0840	462	L.01	L.1	3.9	.41	4.3	.05	.0012 08D	.0003 08D
83-09-13	1000	462	L.01	L.1	3.3	.23	3.5	.05	.0011 08D	.0003 08D
83-10-11	0908	462	L.01	L.1	3.1	.55	3.7	.06	.0018 08D	L.0001 08D
83-11-08	1145	462	L.01	L.1	2.7	.78	3.5	.04	.0011 08D	.0005 08D
83-12-13	0910	462	1.20	.6	2.4	.15	2.6	.16	.0007 08D	.0004 08D

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-18	0910	462	.30	--	--	L.01	--	L.04	.02	L.001
83-02-22	0930	462	.16	--	--	L.01	--	L.04	L.02	L.001
83-03-15	0900	462	--	--	--	L.01	--	L.04	L.02	.001
83-04-19	0820	462	.11	--	--	L.01	--	L.04	L.02	L.001
83-05-17	0845	462	.05	--	--	L.01	--	L.04	L.02	.001
83-06-07	0840	462	.96	--	--	.10	--	L.04	L.02	.010
83-07-12	0900	462	.17	--	--	.23	--	L.04	L.02	.002
83-08-17	0840	462	1.40	--	--	.12	--	.07	L.02	.002 02P
83-09-13	1000	462	.15	--	--	.09	--	.06	L.02	L.001 02P
83-10-11	0908	462	.41	--	--	.13	--	L.04	L.02	.001 02P
83-11-08	1145	462	.19	--	--	.11	--	L.04	L.02	.003 02P
83-12-13	0910	462	L.10	--	--	L.02	--	L.04	L.02	L.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-18	0910	462	L.015	L.002	.002	L.001	.007	L.001	05	L.004
83-02-22	0930	462	L.015	L.002	L.002	.003	.005	L.001	.07	L.004
83-03-15	0900	462	--	L.002	L.002	.002	--	L.001	.05	L.004
83-04-19	0820	462	L.015	L.002	L.002	.003	--	L.001	L.05	L.004
83-05-17	0845	462	L.015	L.002	L.002	.002	.003	L.001	.05	L.004
83-06-07	0840	462	L.015	L.002	.008	.006	.019	L.001	.06	L.004
83-07-12	0900	462	L.015	L.002	L.002	.002	.002	L.001	.05	L.004
83-08-17	0840	462	--	L.001 02P	.002 02P	.002 05P	.002 05P	L.001 02P	.10 01P	L.001 02P
83-09-13	1000	462	--	L.001 02P	.002 02P	.002 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P
83-10-11	0908	462	.001 03P	L.001 02P	.002 02P	.002 05P	L.001 05P	L.001 02P	.17 01P	.001 02P
83-11-08	1145	462	.011 03P	L.001 02P	.002 02P	.001 05P	.002 05P	L.001 02P	.13 01P	.001 02P
83-12-13	0910	462	L.001 03P	L.001 02P	.002 02P	L.001 05P	.001 05P	L.001 02P	L.10 01P	L.001 02P

STATION - 00AL05AK0001
SOUTH SASKATCHEWAN RIVER AT HWY 41, ALBERTA LAT. 50D 44M 15S LONG. 110D 5M 44S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-18	0910	462	.001	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-02-22	0930	462	.003	L.001	.004	.003	L.001	L.002	L.001	L.001
83-03-15	0900	462	L.001	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-04-19	0820	462	.001	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-05-17	0845	462	.011	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-06-07	0840	462	.010	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-07-12	0900	462	.002	L.001	.004	.002	L.001	L.002	L.001	L.001
83-08-17	0840	462	.004	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-09-13	1000	462	.001	L.001	.006	L.001	L.001	L.002	L.001	L.001
83-10-11	0908	462	.002	L.001	.010	.002	L.001	L.002	L.001	L.001
83-11-08	1145	462	.003	L.001	.019	.002	L.001	L.002	L.001	L.001
83-12-13	0910	462	--	L.001	.007	.003	L.001	L.002	L.001	L.001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-18	0910	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-02-22	0930	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-15	0900	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-19	0820	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-17	0845	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-07	0840	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-12	0900	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-17	0840	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-13	1000	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-11	0908	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-11-08	1145	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-12-13	0910	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-18	0910	462	L.001	L.003	L.002	L.2	.030	L.009	L.004	L.002
83-02-22	0930	462	L.001	L.003	L.002	L.2	.010	L.009	L.004	L.002
83-03-15	0900	462	L.001	L.003	L.002	L.2	.020	L.009	L.004	L.002
83-04-19	0820	462	L.001	L.003	L.002	L.2	.030	L.009	L.004	L.002
83-05-17	0845	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-06-07	0840	462	L.001	L.003	L.002	L.2	.050	L.009	L.004	L.002
83-07-12	0900	462	L.001	L.003	L.002	L.2	.100	L.009	L.004	L.002
83-08-17	0840	462	L.001	L.003	L.002	L.2	.100	L.009	L.004	L.002
83-09-13	1000	462	L.001	L.003	L.002	L.2	.026	L.009	L.004	L.002
83-10-11	0908	462	L.001	L.003	L.002	L.2	.034	L.009	L.004	L.002
83-11-08	1145	462	L.001	L.003	L.002	L.2	.012	L.009	L.004	L.002
83-12-13	0910	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-18	0910	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-02-22	0930	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-15	0900	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-19	0820	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-17	0845	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-07	0840	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-12	0900	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-17	0840	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-13	1000	462	L.004	L.2	--	--	--	L.002	--	--
83-10-11	0908	462	L.004	L.2	--	--	--	L.002	--	--
83-11-08	1145	462	L.004	L.2	--	--	--	L.002	--	--
83-12-13	0910	462	L.004	L.2	--	--	--	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00AL05BA0011
BOW RIVER AT HIGHWAY 1 ABOVE LAKE LOUISE, ALBERTA LAT. 51D 28M 35S LONG. 116D 12M 42S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-11	1330	417	.0	9.3	178.	167.	8.0	8.0	.3	.5
83-02-15	1345	417	.0	19.0	178.	180.	8.1	8.0	.5	.5
83-03-08	1345	417	.0	18.7	177.	172.	8.1	8.1	L.1	.2
83-04-12	1210	417	.5	23.4	173.	174.	8.2	8.0	L.1	.5
83-05-03	1200	417	2.5	14.8	184.	180.	8.2	8.1	.2	.5
83-06-07	1035	417	7.5	15.4	150.	155.	8.2	8.1	--	1.1
83-07-05	0915	417	8.5	15.9	152.	156.	8.2	8.1	.8	1.4
83-08-09	1300	417	14.0	23.5	157.	154.	--	8.4	6.0	4.0
83-09-13	1130	417	7.5	20.2	147.	150.	8.2	8.1	2.7	4.5
83-10-04	1100	417	4.8	11.0	153.	150.	8.2	8.3	1.1	1.5
83-11-08	1030	417	2.0	16.2	156.	164.	7.8	8.0	1.5	1.2
83-12-12	1235	417	.5	2.9	174.	176.	8.2	7.8	L.1	.9

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-11	1330	417	L5.	L1.	--	L.001	L1.	L1.	20.	11.9
83-02-15	1345	417	5.	L1.	--	.001	1.	L1	40.	12.1
83-03-08	1345	417	L5.	L1.	--	.001	L1.	L1.	2.	12.0
83-04-12	1210	417	L5.	L1.	--	002	L1.	L1.	40.	11.8
83-05-03	1200	417	10.	1.	--	L.001	4.	1.	67.	11.3
83-06-07	1035	417	5.	2.	--	L.001	L1.	L1.	46.	10.5
83-07-05	0915	417	L5.	L1.	--	.001	6.	3.	100.	9.8
83-08-09	1300	417	5.	3.	--	L.001	--	1.	8.	8.9
83-09-13	1130	417	L5.	1.	--	L.001	L1.	L1.	20.	10.8
83-10-04	1100	417	L5.	1.	--	.001	30.	L1.	8.	10.9
83-11-08	1030	417	L5.	L1. 01R	--	.001 17T	L2. 02U	L2. 12U	10. 03U	11.7
83-12-12	1235	417	L5.	1.	--	.001	L1.	L1.	42.	12.3

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-11	1330	417	0.	.0	100.	82.0	22.5	8.8	92.4	.8
83-02-15	1345	417	0.	.0	102.	84.0	22.5	9.0	93.2	.3
83-03-08	1345	417	0.	.0	102.	84.0	23.0	9.1	94.9	.7
83-04-12	1210	417	0.	.0	101.	83.0	22.9	9.1	94.6	.6
83-05-03	1200	417	0.	.0	112.	92.0	23.6	9.7	98.9	1.0
83-06-07	1035	417	0.	.0	87.	71.0	19.0	7.7	79.1	.5
83-07-05	0915	417	0.	.0	85.	70.0	19.8	7.5	80.3	1.2
83-08-09	1300	417	1.	.9	81.	68.0	19.1	7.6	79.0	.5
83-09-13	1130	417	0.	.0	84.	69.0	19.7	7.3	79.2	.5
83-10-04	1100	417	0.	.0	89.	73.0	19.2	7.0	76.8	.6
83-11-08	1030	417	0.	.0	91.	75.0 06L	--	--	--	--
83-12-12	1235	417	0.	.0	105.	86.3 06L	25.9	8.6	100.1	.6

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-11	1330	417	.3	.6	L.05	11.	2.7	96.	--	--
83-02-15	1345	417	.2	.3	L.05	11.	3.0	97.	--	--
83-03-08	1345	417	.3	.3	.05	11.	3.0	98.	--	--
83-04-12	1210	417	.2	.3	L.05	10.	2.8	96.	--	--
83-05-03	1200	417	.3	.6	L.05	8.	4.4	102.	--	--
83-06-07	1035	417	.1	.3	.08	8.	2.6	81.	--	--
83-07-05	0915	417	.2	.5	L.05	9.	2.4	82.	--	--
83-08-09	1300	417	.2	.3	L.05	9.	2.0	80.	--	--
83-09-13	1130	417	.2	.2	L.05	9.	1.9	80.	--	--
83-10-04	1100	417	.2	.3	L.05	8.	2.3	82.	--	--
83-12-12	1235	417	.2	.2	L.05 08L	14.	2.4 02L	103.	--	--

STATION - 00AL05BA0011
BOW RIVER AT HIGHWAY 1 ABOVE LAKE LOUISE, ALBERTA LAT. 51D 28M 35S LONG. 116D 12M 42S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15301L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-11 1330 417	.003	L.003	Q.000	--	.08	.08	L.01	Q.09
83-02-15 1345 417	L.003	L.003	Q.000	--	.09	11	L.01	Q.12
83-03-08 1345 417	L.003	L.003	Q.000	--	.10	09	L.01	Q.10
83-04-12 1210 417	.003	L.003	Q.000	--	.08	.09	L.01	Q.10
83-05-03 1200 417	L.003	L.003	Q.000	--	.12	.13	L.01	Q.14
83-06-07 1035 417	.006	.003	003	--	.08	.06	L.01	Q.07
83-07-05 0915 417	.007	L.003	Q.004	--	.06	.06	L.01	Q.07
83-08-09 1300 417	.012	.005	.007	--	.04	.06	L.01	Q.07
83-09-13 1130 417	.013	.003	.010	--	05	06	L.01	Q.07
83-10-04 1100 417	.003	L.003	Q.000	--	.07	08	L.01	Q.09
83-11-08 1030 417	L.003 06R	L.003 03V	Q.000	--	.08 51V	09 51R	L.01 02R	Q.10
83-12-12 1235 417	L.003	L.003	Q.000	--	.08	.09	L.01	Q.10

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-11 1330 417	.08	L.1	.4	.05	.5	.02	L.0005	L.0005
83-02-15 1345 417	.07	L.1	.6	L.01	Q.6	.02	L.0005	L.0005
83-03-08 1345 417	.09	L.1	.5	03	.5	L.02	L.0005	L.0005
83-04-12 1210 417	.07	L.1	.3	.06	.4	.02	L.0005	L.0005
83-05-03 1200 417	.06	L.1	1.9	13	2.0	04	L.0005	L.0005
83-06-07 1035 417	.05	L.1	.9	.09	1.0	L.02	L.0005	L.0005
83-07-05 0915 417	.04	L.1	.7	.04	.7	L.02	L.0005	L.0005
83-08-09 1300 417	.03	L.1	.5	.19	.7	.02	.0009 08D	L.0001 08D
83-09-13 1130 417	.04	L.1	.4	.06	.5	.02	.0010 08D	L.0001 08D
83-10-04 1100 417	.04	L.1	.5	.06	.6	L.02	.0010 08D	L.0001 08D
83-11-08 1030 417	.06 10R	L.1 06W	.7 04R	.04 02R	.7	.03 05V	0003 08V	L.0001 08V
83-12-12 1235 417	.06	L.1	.9	L.01	Q.9	.02	0013 08D	L.0001 08D

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-11 1330 417	--	--	--	L.01	--	L.04	L.02	--
83-02-15 1345 417	--	--	--	L.01	--	L.04	L.02	--
83-03-08 1345 417	--	--	--	L.01	--	L.04	L.02	--
83-04-12 1210 417	--	--	--	L.01	--	L.04	L.02	--
83-05-03 1200 417	--	--	--	L.01	--	L.04	L.02	--
83-06-07 1035 417	--	--	--	L.01	--	L.04	L.02	--
83-07-05 0915 417	--	--	--	L.01	--	L.04	L.02	--
83-08-09 1300 417	--	--	--	L.01	--	L.04	L.02	--
83-09-13 1130 417	--	--	--	L.01	--	L.04	L.02	--
83-10-04 1100 417	--	--	--	L.01	--	L.04	L.02	--
83-11-08 1030 417	--	--	--	L.02 04T	--	L.04 04T	L.02 11W	--
83-12-12 1235 417	--	--	--	L.02	--	L.04	L.02	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05BB0009 LAT. 51D 9M 42S LONG. 115D 40M 13S
BREWSTER CREEK AT HWY 1 NEAR MOUTH. BANFF NATIONAL PARK, ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-11	1535	3	2.0	9.0	367.	340.	8.3	8.2	.2	.3
83-02-15	1520	3	2.5	16.4	361.	358.	8.3	8.2	L.1	.5
83-03-08	1505	3	2.5	19.0	366.	365.	8.3	8.2	L.1	.4

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-11	1535	3	L5.	L1.	--	L.001	L1.	L1.	--	11.8
83-02-15	1520	3	5.	1.	--	.001	L1.	L1.	--	11.6
83-03-08	1505	3	L5.	L1.	--	L.001	L1.	L1.	--	11.8

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-11	1535	3	0.	.0	152.	125.0	53.6	16.0	199.7	.6
83-02-15	1520	3	0.	.0	152.	125.0	53.7	16.5	202.0	.4
83-03-08	1505	3	0.	.0	146.	120.0	48.1	16.6	188.4	.5

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-11	1535	3	.3	.5	.19	64.	3.7	214.	--	--
83-02-15	1520	3	.3	.5	14	70.	4.0	220.	--	--
83-03-08	1505	3	.4	.4	.12	64.	3.8	206.	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-11	1535	3	L.003	L.003	Q.000	--	.11	.12	--	--
83-02-15	1520	3	L.003	--	--	--	.12	.11	L.01	Q.12
83-03-08	1505	3	L.003	L.003	Q.000	--	.12	.13	L.01	Q.14

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-11	1535	3	.11	L.1	.5	--	--	.03	L.0005	.0007
83-02-15	1520	3	.11	L.1	.5	.01	.5	.02	L.0005	.0008
83-03-08	1505	3	.11	L.1	.6	.03	.6	L.02	L.0005	.0007

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-11	1535	3	--	--	--	L.01	--	L.04	L.02	--
83-02-15	1520	3	--	--	--	L.01	--	L.04	L.02	--
83-03-08	1505	3	--	--	--	L.01	--	L.04	L.02	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00AL05BE0013
BOW RIVER ABOUT 4.5 KM ABOVE CANMORE BELOW SE BOUNDARY OF BANFF NAT'L PARK ALBERTA LAT. 51D 7M 22S LONG. 115D 23M 12S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-12	0900	417	1.5	7.4	329.	303.	8.0	8.0	3	.4
83-02-16	0845	417	.5	16.6	327.	321.	8.1	7.9	.2	.6
83-03-09	0845	417	2.0	18.8	330.	328.	8.2	8.1	.3	.5
83-04-12	1350	417	4.7	23.7	334.	330.	8.3	8.3	.5	.5
83-05-03	1350	417	6.5	15.3	323.	310.	8.4	8.3	.7	.5
83-06-07	1305	417	9.8	13.9	190.	211.	8.3	8.2	--	3.3
83-07-05	1115	417	10.0	21.5	209.	216.	8.3	8.3	1.7	1.8
83-08-09	1515	417	14.0	24.2	231.	227.	8.2	8.4	8.0	4.0
83-09-13	1430	417	10.5	20.0	284.	284.	8.4	8.4	2.2	2.6
83-10-04	1315	417	6.0	11.8	275.	268.	8.3	8.5	1.0	.8
83-11-08	1240	417	3.5	14.4	283.	287.	8.2	8.2	1.0	.5
83-12-12	1045	417	.0	8.3	322.	323.	8.3	7.8	.3	1.2

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-12	0900	417	L5.	1	--	L.001	104.	12	50	11.2
83-02-16	0845	417	5.	L1.	--	.001	270.	L2.	12.	11.5
83-03-09	0845	417	L5.	1.	--	.001	42.	2	8.	12.0
83-04-12	1350	417	10.	2.	--	.001	4.	L2.	4.	12.0
83-05-03	1350	417	L5.	2.	--	L.001	38.	2.	12	11.4
83-06-07	1305	417	5.	7.	--	.001	14	4.	10.	10.6
83-07-05	1115	417	L5.	2.	--	.001	6.	L2.	16.	10.2
83-08-09	1515	417	10.	9.	--	001	--	30	50	9.7
83-09-13	1430	417	L5.	L1.	--	002	156	18.	24	10.0
83-10-04	1315	417	L5	1	--	001	2.	L2.	8.	11.4
83-11-08	1240	417	L5.	L1.	--	.001	--	2.	2	13.0
83-12-12	1045	417	L5.	1.	--	.001	34.	6.	12.	12.2

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-12	0900	417	0.	.0	152.	125.0	46.1	15.4	178.5	1.6
83-02-16	0845	417	0.	.0	152.	125.0	44.2	15.3	173.4	1.5
83-03-09	0845	417	0.	.0	158.	130.0	45.6	15.9	179.3	1.8
83-04-12	1350	417	0.	.0	158.	130.0	46.1	16.3	182.2	1.8
83-05-03	1350	417	0.	.0	146.	120.0	44.6	15.2	173.9	1.5
83-06-07	1305	417	0.	.0	107.	88.0	27.8	9.5	108.5	.9
83-07-05	1115	417	0.	0	108.	89.0	26.5	9.4	104.9	.8
83-08-09	1515	417	1.	.6	109.	91.0	30.2	10.6	119.0	1.0
83-09-13	1430	417	0.	4	133.	110.0	39.0	13.0	150.9	1.1
83-10-04	1315	417	0.	.0	134.	110.0	36.3	12.0	140.0	1.3
83-11-08	1240	417	0.	.0	141.	116.0 06L	38.7	13.1	150.6	1.3
83-12-12	1045	417	0.	0	155.	127.0 06L	44.5	14.9	172.5	1.6

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-12	0900	417	.4	1.5	.12	44.	4.4	188.	--	.003
83-02-16	0845	417	.4	1.6	.09	46.	4.6	189.	--	L.001
83-03-09	0845	417	.5	1.5	.07	46.	4.2	194.	--	.001
83-04-12	1350	417	.5	1.7	.21	52.	4.2	201.	--	L.001
83-05-03	1350	417	.4	1.2	.10	44.	4.2	183.	--	.002
83-06-07	1305	417	.2	.7	.09	19.	3.6	115.	--	.002
83-07-05	1115	417	.3	.6	.05	19.	3.2	113	--	L.001
83-08-09	1515	417	.3	.7	L.05	23.	3.0	123.	--	.001
83-09-13	1430	417	.3	.7	.13	36.	3.7	160.	--	.001
83-10-04	1315	417	.3	1.1	L.05	34.	3.6	155.	--	.002
83-11-08	1240	417	.3	.9	.10 08L	35.	3.3 02L	163.	--	L.001
83-12-12	1045	417	.4	1.1	.12 08L	43.	4.0 02L	186.	--	.001

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05BE0013 LAT. 51D 7M 22S LONG. 115D 23M 12S
BOW RIVER ABOUT 4.5 KM ABOVE CANMORE BELOW SE BOUNDARY OF BANFF NAT'L PARK ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-12	0900	417	.024	.017	.007	--	.14	.14	L.01	Q.15
83-02-16	0845	417	.020	.017	.003	--	.15	.14	L.01	Q.15
83-03-09	0845	417	.022	.019	.003	--	.13	.12	L.01	Q.13
83-04-12	1350	417	.025	.017	.008	--	.11	.13	.08	.21
83-05-03	1350	417	.014	.008	.006	--	07	.08	L.01	Q.09
83-06-07	1305	417	.013	.003	.010	--	07	.08	.02	.10
83-07-05	1115	417	.008	.003	.005	--	.06	.06	L.01	Q.07
83-08-09	1515	417	.011	.010	.001	--	06	.05	L.01	Q.06
83-09-13	1430	417	.007	006	.001	--	.08	.08	.04	.12
83-10-04	1315	417	.011	.009	.002	--	.12	.12	L.01	Q.13
83-11-08	1240	417	.009	.006	.003	--	10	.10	L.01	Q.11
83-12-12	1045	417	.007	.006	.001	--	.17	.16	L.01	Q.17

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-12	0900	417	.13	L.1	.5	.13	.6	.04	L.0005	L.0005
83-02-16	0845	417	.12	L.1	.7	.13	.8	.03	L.0005	L.0005
83-03-09	0845	417	.10	L.1	.6	.12	.7	L.02	L.0005	L.0005
83-04-12	1350	417	.08	L.1	.6	.36	1.0	.03	L.0005	L.0005
83-05-03	1350	417	.04	L.1	1.1	.21	1.3	.03	L.0005	L.0005
83-06-07	1305	417	.05	L.1	1.0	.24	1.2	L.02	L.0005	L.0005
83-07-05	1115	417	.04	L.1	.9	.13	1.0	.02	L.0005	L.0005
83-08-09	1515	417	.03	L.1	.5	.23	.7	.02	L.0001 08D	L.0001 08D
83-09-13	1430	417	.04	L.1	.7	.24	.9	.04	.0012 08D	.0003 08D
83-10-04	1315	417	.06	L.1	.5	.12	.6	.04	.0012 08D	.0003 08D
83-11-08	1240	417	.06	L.1	.6	.08	.7	.03	.0007 08D	.0003 08D
83-12-12	1045	417	.11	L.1	.5	.07	.6	.04	.0006 08D	.0003 08D

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-12	0900	417	--	--	--	L.01	--	L.04	L.02	L.001
83-02-16	0845	417	--	--	--	L.01	--	L.04	L.02	L.001
83-03-09	0845	417	--	--	--	L.01	--	L.04	L.02	L.001
83-04-12	1350	417	--	--	--	L.01	--	L.04	L.02	L.001
83-05-03	1350	417	--	--	--	L.01	--	L.04	L.02	L.001
83-06-07	1305	417	--	--	--	L.01	--	L.04	L.02	L.001
83-07-05	1115	417	--	--	--	L.01	--	L.04	L.02	L.001
83-08-09	1515	417	--	--	--	L.01	--	L.04	L.02	L.001 02P
83-09-13	1430	417	--	--	--	L.01	--	L.04	L.02	L.001 02P
83-10-04	1315	417	--	--	--	L.01	--	L.04	L.02	L.001 02P
83-11-08	1240	417	--	--	--	L.02	--	L.04	L.02	L.001 02P
83-12-12	1045	417	--	--	--	L.02	--	L.04	L.02	.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-12	0900	417	--	L.002	L.002	L.001	L.001	L.001	L.05	L.004
83-02-16	0845	417	--	L.002	L.002	.001	.003	L.001	L.05	L.004
83-03-09	0845	417	--	L.002	L.002	.001	--	L.001	L.05	L.004
83-04-12	1350	417	--	L.002	L.002	.001	--	L.001	L.05	L.004
83-05-03	1350	417	--	L.002	L.002	.002	.007	L.001	L.05	L.004
83-06-07	1305	417	--	L.002	L.002	.002	.002	L.001	L.05	L.004
83-07-05	1115	417	--	L.002	.003	.001	002	.001	L.05	L.004
83-08-09	1515	417	--	L.002 02P	L.002 02P	L.001 05P	.002 05P	L.001 02P	L.10 01P	L.004 02P
83-09-13	1430	417	--	L.001 02P	.005 02P	005 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P
83-10-04	1315	417	--	L.001 02P	L.001 02P	L.001 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P
83-11-08	1240	417	--	L.001 02P	L.001 02P	L.001 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P
83-12-12	1045	417	--	L.001 02P	.001 02P	L.001 05P	002 05P	L.001 02P	L.10 01P	L.001 02P

STATION - 00AL05BE0013 LAT. 51D 7M 22S LONG. 115D 23M 12S
BOW RIVER ABOUT 4.5 KM ABOVE CANMORE BELOW SE BOUNDARY OF BANFF NAT'L PARK ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-12	0900	417	.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-02-16	0845	417	L.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-03-09	0845	417	.002	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-04-12	1350	417	.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-05-03	1350	417	.002	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-06-07	1305	417	L.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-07-05	1115	417	.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-08-09	1515	417	.008	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-09-13	1430	417	.006	L.001	.006	.001	L.001	L.002	L.001	L.001
83-10-04	1315	417	L.001	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-11-08	1240	417	.002	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-12-12	1045	417	--	L.001	L.001	L.001	L.001	L.002	L.001	L.001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-12	0900	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-02-16	0845	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-09	0845	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-12	1350	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-03	1350	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-07	1305	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-05	1115	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-09	1515	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-13	1430	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-04	1315	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-11-08	1240	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-12-12	1045	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-12	0900	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-02-16	0845	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-09	0845	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-04-12	1350	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-03	1350	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-06-07	1305	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-07-05	1115	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-09	1515	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-09-13	1430	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-10-04	1315	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-11-08	1240	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-12-12	1045	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	.004

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-12	0900	417	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-02-16	0845	417	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-09	0845	417	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-12	1350	417	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-03	1350	417	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-07	1305	417	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-05	1115	417	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-09	1515	417	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-09-13	1430	417	L.004	L.2	--	--	--	L.002	--	--
83-10-04	1315	417	L.004	L.2	--	--	--	L.002	--	--
83-11-08	1240	417	L.004	L.2	--	--	--	L.002	--	--
83-12-12	1045	417	L.004	L.2	--	--	--	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05BH0017
BOW RIVER AT COCHRANE, ALBERTA

LAT. 51D 10M 26S LONG. 114D 28M 05S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-12 1105 479	1.0	6.0	327.	300.	8.2	8.2	.6	.9
83-02-16 1100 479	.0	15.6	297.	298.	8.2	8.1	.4	1.0
83-03-09 1045 479	2.0	19.0	293.	295.	8.3	8.2	.3	1.4
83-04-13 0850 479	2.0	12.5	277.	288.	8.4	8.3	.6	.9
83-05-04 0845 479	5.0	18.3	295.	287	8.4	8.2	2.8	3.1
83-06-08 0900 479	11.0	16.1	241.	247.	8.4	8.3	--	3.7
83-07-05 1345 479	14.5	21.4	252.	256.	8.4	8.4	9.8	8.9
83-08-04 0800 479	13.0	18.2	262.	246.	8.0	8.3	2.0	1.0
83-09-14 0845 479	9.5	16.6	268.	268	8.4	8.3	.3	.6
83-10-05 0850 479	5.5	17.4	282.	286.	8.3	8.3	.3	.5
83-11-09 0750 479	4.0	10.9	306.	--	8.1	8.1	2.0	1.1
83-12-12 0900 479	.5	9.1	320.	318.	8.4	8.1	.2	.8

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	05717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-12 1105 479	L5.	L1.	--	.002	L2.	1.	22.	12.7
83-02-16 1100 479	5.	1.	--	.001	2.	L2.	18.	12.7
83-03-09 1045 479	L5.	L1.	--	L.001	4.	L2.	8.	13.0
83-04-13 0850 479	5.	1.	--	.002	L2.	L2.	36.	12.4
83-05-04 0845 479	10.	5	--	L.001	6.	6.	116.	11.2
83-06-08 0900 479	10.	3. 01R	--	.001 177	20. 02U	6. 12U	170. 03U	10.4
83-07-05 1345 479	5.	5.	--	.001	--	22.	72.	9.5
83-08-04 0800 479	L5.	L1.	--	.001	--	8.	75.	8.4
83-09-14 0845 479	L5.	L1.	--	.002	24.	L2.	120.	9.6
83-10-05 0850 479	L5.	L1.	--	L.001	6.	L2.	60.	10.7
83-11-09 0750 479	L5.	L1.	--	.002	18.	18.	56.	11.1
83-12-12 0900 479	L5.	L1.	--	L.001	L2.	L2.	56.	12.7

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-12 1105 479	0.	.0	165.	135.0	48.8	13.6	177.8	1.7
83-02-16 1100 479	0.	.0	152.	125.0	44.3	12.6	162.5	1.0
83-03-09 1045 479	0.	.0	146.	120.0	44.1	12.5	161.6	1.2
83-04-13 0850 479	0.	.0	152.	125.0	44.0	12.5	161.3	1.4
83-05-04 0845 479	0.	.0	146.	120.0	43.0	12.4	158.4	2.1
83-06-08 0900 479	0.	.0	128.	105.0	33.1	10.8	127.1	1.2
83-07-05 1345 479	1.	.9	132.	110.0	33.0	10.5	125.6	1.7
83-08-04 0800 479	0.	.0	128.	105.0	34.2	11.3	131.9	1.5
83-09-14 0845 479	0.	.0	140.	115.0	37.6	12.1	143.7	1.2
83-10-05 0850 479	0.	.0	140.	115.0	40.0	11.5	147.2	1.3
83-11-09 0750 479	0.	.0	160.	131.0 08L	43.3	12.7	160.4	1.5
83-12-12 0900 479	0.	.0	171.	140.0 08L	46.9	13.5	172.7	1.8

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-12 1105 479	.4	1.2	.14	38.	3.4	188.	--	--
83-02-16 1100 479	.4	1.0	.10	38.	3.5	176.	--	--
83-03-09 1045 479	.4	.9	.08	40.	3.4	175.	--	--
83-04-13 0850 479	.4	1.1	.13	36.	3.4	174.	--	--
83-05-04 0845 479	.6	1.4	.08	32.	3.4	167.	--	--
83-06-08 0900 479	.3	.9	.19	24.	3.6	137.	--	--
83-07-05 1345 479	.5	1.0	.08	22.	3.8	139.	--	--
83-08-04 0800 479	.3	.9	.14	23.	3.3	138.	--	--
83-09-14 0845 479	.4	.9	.07	35.	3.0	159.	--	--
83-10-05 0850 479	.4	1.1	.11	33.	3.2	160.	--	--
83-11-09 0750 479	.4	1.0	.13 08L	35.	3.0 02L	175.	--	--
83-12-12 0900 479	.4	1.2	.14 08L	38.	3.1 02L	189.	--	--

STATION - 00AL05BH0017
BOW RIVER AT COCHRANE, ALBERTA

LAT. 51D 10M 28S LONG. 114D 28M 05S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-12	1105	479	.008	L.003	Q.005	--	.10	.10	L.01	.11
83-02-16	1100	479	.005	.004	.001	--	.17	.10	L.01	Q.11
83-03-09	1045	479	.007	L.003	Q.004	--	.08	.08	L.01	Q.09
83-04-13	0850	479	.005	.005	.000	--	.05	.06	L.01	Q.07
83-05-04	0845	479	.010	L.003	Q.007	--	.10	.10	--	--
83-06-08	0900	479	.012 06P	.003 03V	.009	--	.10 51V	.09 51R	L.01 02R	Q.10
83-07-05	1345	479	.009	.003	.006	--	.12	.10	.03	.13
83-08-04	0800	479	.007	.006	.001	--	.06	.06	L.01	Q.07
83-09-14	0845	479	.003	L.003	Q.000	--	.06	.06	--	--
83-10-05	0850	479	.007	L.003	Q.004	--	.07	.07	.02	.09
83-11-09	0750	479	.004	.003	.001	--	.05	.07	L.01	Q.08
83-12-12	0900	479	.033	.011	.022	--	.10	.12	L.01	Q.13

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-12	1105	479	.10	L.1	.7	11	8	.04	L.0005	L.0005
83-02-16	1100	479	.15	L.1	.8	.15	1.0	.02	L.0005	.0005
83-03-09	1045	479	.05	L.1	.7	.18	.9	L.02	L.0005	L.0005
83-04-13	0850	479	.04	L.1	.8	.19	1.0	.02	L.0005	L.0005
83-05-04	0845	479	.04	L.1	1.5	--	--	.02	L.0005	L.0005
83-06-08	0900	479	.06 10R	L.1 06N	1.1 04R	.15 02R	1.3	L.02 05V	L.0005 04V	L.0005 02V
83-07-05	1345	479	.05	L.1	1.3	.20	1.5	.04	L.0005	L.0005
83-08-04	0800	479	.03	L.1	1.0	.08	1.1	.02	.0004 08D	.0002 08D
83-09-14	0845	479	.03	L.1	.6	--	--	.02	.0011 08D	.0003 08D
83-10-05	0850	479	.02	L.1	.7	.14	.8	.05	.0004 08D	.0003 08D
83-11-09	0750	479	.03	L.1	1.2	.13	1.3	.03	.0002 08D	.0001 08D
83-12-12	0900	479	.06	L.1	1.0	.03	1.0	.02	.0018 08D	.0004 08D

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-12	1105	479	--	L.004	--	L.01	--	L.04	L.02	L.001
83-02-16	1100	479	--	--	--	L.01	--	L.04	L.02	--
83-03-09	1045	479	--	--	--	L.01	--	L.04	L.02	--
83-04-13	0850	479	--	--	--	L.01	--	L.04	L.02	--
83-05-04	0845	479	--	L.004	--	L.01	--	L.04	L.02	L.001
83-06-08	0900	479	--	--	--	L.01 04T	--	L.04 04T	L.02 11N	--
83-07-05	1345	479	--	--	--	L.01	--	L.04	L.02	--
83-08-04	0800	479	--	L.004	--	L.01	--	L.04	L.02	L.001 02P
83-09-14	0845	479	--	--	--	L.01	--	L.04	L.02	--
83-10-05	0850	479	--	L.005	--	L.01	--	L.04	L.02	L.001 02P
83-11-09	0750	479	--	--	--	L.02	--	L.04	L.02	--
83-12-12	0900	479	--	--	--	L.02	--	L.04	L.02	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-12	1105	479	--	L.002	L.002	L.001	L.001	L.001	L.05	L.004
83-05-04	0845	479	--	L.002	L.002	L.001	.005	L.001	05	L.004
83-08-04	0800	479	--	L.002 02P	L.002 02P	L.001 05P	.002 05P	L.001 02P	L.05 01P	L.004 02P
83-10-05	0850	479	--	L.001 02P	L.001 02P	.001 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05BH0017
BOW RIVER AT COCHRANE, ALBERTA

LAT. 51D 10M 26S LONG. 114D 28M 05S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-12 1105 479	L.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-02-16 1100 479	L.001	--	--	--	--	--	--	--
83-03-09 1045 479	.003	--	--	--	--	--	--	--
83-04-13 0850 479	L.001	--	--	--	--	--	--	--
83-05-04 0845 479	.001	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-06-08 0900 479	L.001 35W	--	--	--	--	--	--	--
83-07-06 1345 479	.002	--	--	--	--	--	--	--
83-08-04 0800 479	L.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-08-14 0845 479	L.001	--	--	--	--	--	--	--
83-10-05 0850 479	L.001	L.001	.004	L.001	L.001	L.002	L.001	L.001
83-11-09 0750 479	.001	--	--	--	--	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L MEOD (DIELDRIN) UG/L
83-01-12 1105 479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-04 0845 479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-04 0800 479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-05 0850 479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-12 1105 479	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-04 0845 479	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-04 0800 479	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-10-05 0850 479	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1280 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-12 1105 479	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-05-04 0845 479	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-08-04 0800 479	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-10-05 0850 479	L.004	--	--	--	--	L.002	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18205P IMIDAN UG/L	18215P DISULFOTON UG/L	18230P CRUFOMATE UG/L	18240P PARATHION UG/L	18245P PARATHION-METHYL UG/L	18250P MALATHION UG/L	18260P FENCHLORPHOS (RONNEL) UG/L	18270P DIAZINON UG/L
83-01-12 1105 479	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-05-04 0845 479	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-08-04 0800 479	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-10-05 0850 479	--	--	L.2	L.02	L.02	--	L.02	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18300P PHORATE UG/L	18310P ETHION UG/L	18320P CARBO-PHENOTHION UG/L	92111P URANIUM DISSOLVED U UG/L	88502P RADIUM RADIATION RA-226 BQ/L	01502P TRITIUM RADIATION H-3 BQ/L	51501P ANTIMONY RADIATION SB-125 BQ/L	55502P CESIUM RADIATION CS-137 BQ/L
83-01-12 1105 479	L.02	L.02	L.02	--	--	--	--	--
83-05-04 0845 479	L.02	L.02	L.02	--	--	--	--	--
83-08-04 0800 479	L.02	L.02	L.02	--	--	--	--	--
83-10-05 0850 479	--	--	L.02	--	--	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00AL05BN0001
BOW RIVER NEAR MOUTH, ALBERTA

LAT. 50D 2M 47S LONG. 111D 35M 26S

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C	02061L TEMP. WATER DEG. C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-17	1330		479	.5	21.4	404.	387.	8.1	7.8	7.0	5.1
83-02-14	1400		479	1.0	18.1	362.	368.	--	7.6	--	6.0
83-03-14	1330		479	3.0	20.5	343.	338.	8.3	8.0	50.0	27.0
83-04-11	1400		479	5.0	19.0	396.	372.	8.5	8.5	12.0	8.0
83-05-24	1400		479	17.0	23.2	317.	313.	8.8	8.9	2.0	1.4
83-06-14	1130		479	18.0	20.0	319.	316.	8.2	8.3	56.0	45.0
83-07-11	1315		479	20.5	22.6	306.	311.	8.4	8.6	36.0	22.0
83-08-15	1415		479	22.0	16.8	352.	327.	8.8	9.0	6.0	2.8
83-09-26	1230		479	14.5	16.9	408.	397.	8.6	8.5	3.2	3.0
83-10-18	1420		479	7.0	20.1	438.	432.	8.3	8.2	6.0	3.9
83-11-07	1230		479	4.0	11.3	389.	381.	8.4	8.2	9.5	7.5
83-12-06	1500		479	1.0	5.7	466.	474.	7.6	7.9	2.5	1.6

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-17	1330		479	L5.	13.	--	.001	19	14	108.	13.3
83-02-14	1400		479	10.	11.	--	.005	G80	20	G800.	12.7
83-03-14	1330		479	20.	69.	--	.030	40.	4	470.	12.8
83-04-11	1400		479	20.	23.	--	.060	L2.	L2.	12.	13.7
83-05-24	1400		479	10.	2.	--	.002	--	2.	22.	10.7
83-06-14	1130		479	10.	78.	--	.020	--	18.	810.	8.4
83-07-11	1315		479	20.	47.	--	.030	--	50.	G800.	8.8
83-08-15	1415		479	20.	8.	--	.002	--	13.	187.	10.3
83-09-26	1230		479	10.	4.	--	L.001	110	12.	200.	9.9
83-10-18	1420		479	5.	4.	--	.007	20	L2	10.	12.0
83-11-07	1230		479	10.	16.	--	.004	130.	28.	180.	12.9
83-12-06	1500		479	L5.	L1.	--	L.001	12	L2	123.	12.0

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-17	1330		479	0.	.0	177.	145.0	52.0	15.7	194.5	8.5
83-02-14	1400		479	0.	.0	165.	135.0	48.1	14.4	179.4	7.7
83-03-14	1330		479	0.	.0	146.	120.0	42.0	12.5	156.3	12.0
83-04-11	1400		479	5.	3.9	149.	130.0	46.0	15.4	178.3	15.0
83-05-24	1400		479	10.	8.7	91.	92.0	28.0	15.0	131.7	13.0
83-06-14	1130		479	0.	.0	146.	120.0	38.8	12.5	148.3	7.8
83-07-11	1315		479	5.	4.0	137.	120.0	36.1	13.2	144.5	7.7
83-08-15	1415		479	7.	6.0	113.	105.0	30.0	16.5	142.8	15.0
83-09-26	1230		479	3.	2.2	147.	125.0	36.0	18.0	164.0	20.0
83-10-18	1420		479	0.	.0	171.	140.0 06L	43.0	19.2	186.4	21.0
83-11-07	1230		479	0.	.0	177.	145.0 06L	49.2	15.5	186.7	11.0
83-12-06	1500		479	0.	.0	149.	121.9 06L	40.4	17.2	171.7	15.2

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-17	1330		479	1.2	6.5	.13	53.	3.6	228.	--	--
83-02-14	1400		479	2.0	5.7	.13	50.	3.0	212.	--	--
83-03-14	1330		479	1.7	7.4	.07	48.	2.2	198.	--	--
83-04-11	1400		479	1.7	8.4	.11	60.	.2	225.	--	--
83-05-24	1400		479	.6	5.7	.12	56.	.2	174.	--	--
83-06-14	1130		479	1.1	3.6	.21	36.	.8	173.	--	--
83-07-11	1315		479	1.1	3.4	.14	32.	1.2	167.	--	--
83-08-15	1415		479	2.4	5.0	.15	59.	.8	192.	--	--
83-09-26	1230		479	2.4	6.1	.15	75.	.8	233.	--	--
83-10-18	1420		479	2.2	6.3	.16 08L	77.	.5 02L	253.	--	--
83-11-07	1230		479	1.5	6.3	.14 08L	52.	1.0 02L	224.	--	--
83-12-06	1500		479	2.1	13.0	.16 08L	67.	1.9 02L	230.	--	--

STATION - 00AL05BN0001
BOW RIVER NEAR MOUTH, ALBERTA

LAT. 50D 2M 47S LONG. 111D 35M 26S

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO P04 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-17	1330		479	.066	.046	.020	--	1.10	1.10	.08	1.18
83-02-14	1400		479	.120	.079	.041	--	1.70	1.50	.22	1.72
83-03-14	1330		479	.140	.027	.113	--	1.30	1.30	.22	1.52
83-04-11	1400		479	.071	.027	.044	--	1.00	1.00	.30	1.30
83-05-24	1400		479	.018	.011	.007	--	.20	.19	.04	.23
83-06-14	1130		479	.160	.014	.146	--	.33	.32	.43	.75
83-07-11	1315		479	.100	.010	.090	--	.28	.26	.35	.61
83-08-15	1415		479	.033	.014	.019	--	.29	.29	.10	.39
83-09-26	1230		479	.029	.014	.015	--	.37	.33	.10	.43
83-10-18	1420		479	.024	.009	.015	--	.24	.22	L.01	Q.23
83-11-07	1230		479	.035	.005	.030	--	1.20	1.20	.07	1.27
83-12-06	1500		479	.006	--	--	--	1.30	1.30	L.01	Q1.31

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-17	1330		479	.82	.7	1.4	.67	2.1	.07	L.0005	L.0005
83-02-14	1400		479	1.30	.3	2.4	1.20	3.6	.07	L.0005	.0005
83-03-14	1330		479	1.30	.3	1.8	2.80	4.6	.05	L.0005	L.0005
83-04-11	1400		479	.95	L.1	2.1	1.60	3.7	.04	L.0005	.0007
83-05-24	1400		479	L.01	L.1	2.8	.21	3.0	.04	L.0005	L.0005
83-06-14	1130		479	.17	L.1	2.3	2.70	5.0	.03	L.0005	L.0005
83-07-11	1315		479	.11	L.1	2.3	2.20	4.5	.03	.0006	L.0005
83-08-15	1415		479	L.01	L.1	3.4	.68	4.1	.05	.0015 08D	.0001 08D
83-09-26	1230		479	.02	L.1	3.5	.62	4.1	.05	.0016 08D	.0003 08D
83-10-18	1420		479	.04	L.1	3.1	.38	3.5	.05	.0006 08D	.0004 08D
83-11-07	1230		479	.54	L.1	1.3	.44	1.7	.08	.0007 08D	.0003 08D
83-12-06	1500		479	1.40	.6	1.6	.09	1.7	.10	.0015 08D	.0003 08D

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-17	1330		479	--	L.004	--	L.01	--	L.04	L.02	L.001
83-02-14	1400		479	--	--	--	L.01	--	L.04	L.02	--
83-03-14	1330		479	--	--	--	L.01	--	L.04	L.02	--
83-04-11	1400		479	--	--	--	L.01	--	L.04	L.02	--
83-05-24	1400		479	--	L.004	--	L.01	--	L.04	L.02	L.001
83-06-14	1130		479	--	--	--	L.01	--	.04	L.02	--
83-07-11	1315		479	--	--	--	L.01	--	L.04	L.02	--
83-08-15	1415		479	--	L.005	--	L.01	--	L.04	L.02	.002 02P
83-09-26	1230		479	--	--	--	L.01	--	.04	L.02	--
83-10-18	1420		479	--	L.005	--	L.01	--	.04	L.02	L.001 02P
83-11-07	1230		479	--	--	--	L.02	--	L.04	L.02	--
83-12-06	1500		479	--	--	--	L.02	--	L.04	.08	--

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-17	1330		479	--	L.002	L.002	.002	.003	L.001	L.05	L.004
83-05-24	1400		479	--	L.002	.010	.003	.020	.001	.05	.007
83-08-15	1415		479	--	L.001 02P	.002 02P	.002 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P
83-10-18	1420		479	--	L.001 02P	.005 02P	.006 05P	.001 05P	L.001 02P	.15 01P	.002 02P

STATION - 00AL05BN0001
BOW RIVER NEAR MOUTH, ALBERTA

LAT. 50D 2M 47S LONG. 111D 38M 28S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-17 1330 479	.001	L .001	L .001	L .001	L .001	L .002	L .001	L .001
83-02-14 1400 479	.003	--	--	--	--	--	--	--
83-03-14 1330 479	.001	--	--	--	--	--	--	--
83-04-11 1400 479	.002	--	--	--	--	--	--	--
83-05-24 1400 479	.007	L .001	L .001	L .001	L .001	L .002	L .001	L .001
83-06-14 1130 479	.002	--	--	--	--	--	--	--
83-07-11 1315 479	.003	--	--	--	--	--	--	--
83-08-15 1415 479	.006	L .001	.003	L .001	L .001	L .002	L .001	L .001
83-09-26 1230 479	.005	--	--	--	--	--	--	--
83-10-18 1420 479	.003	L .001	.014	.002	L .001	L .002	L .001	L .001
83-11-07 1230 479	.003	--	--	--	--	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-17 1330 479	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-05-24 1400 479	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-08-15 1415 479	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-10-18 1420 479	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-17 1330 479	L .001	L .003	L .002	L .2	009	L 009	L .004	L .002
83-05-24 1400 479	L .001	L .003	L .002	L .2	070	L .009	L .004	L .002
83-08-15 1415 479	L .001	L .003	L .002	L .2	080	L .009	L .004	L .002
83-10-18 1420 479	L .001	L .003	L .002	L .2	L .004	L .009	L .004	L .002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-17 1330 479	L .004	--	L .002	L .002	L .005	L .002	L .5	L .2
83-05-24 1400 479	L .004	--	L .002	L .002	L .005	L .002	L .5	L .2
83-08-15 1415 479	L .004	--	L .002	L .002	L .005	L .002	L .5	L .2
83-10-18 1420 479	L .004	--	--	--	--	L .002	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18205P IMIDAN UG/L	18215P DISULFOTON UG/L	18230P CRUFOMATE UG/L	18240P PARATHION UG/L	18245P PARATHION-METHYL UG/L	18250P MALATHION UG/L	18260P FENCHLORPHOS (RONNEL) UG/L	18270P DIAZINON UG/L
83-01-17 1330 479	L .2	L .02	L .2	L .02	L .02	L .05	L .02	L .02
83-05-24 1400 479	L .2	L .02	L .2	L .02	L .02	L .05	L .02	L .02
83-08-15 1415 479	L .2	L .02	L .2	L .02	L .02	L .05	L .02	L .02
83-10-18 1420 479	--	--	L .2	L .02	L .02	--	L .02	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18300P PHORATE UG/L	18310P ETHION UG/L	18320P CARBO-PHENOTHION UG/L	92111P URANIUM DISSOLVED U UG/L	88502P RADIUM RADIATION RA-226 BQ/L	01502P TRITIUM RADIATION H-3 BQ/L	51501P ANTIMONY RADIATION SB-125 BQ/L	55502P CESIUM RADIATION CS-137 BQ/L
83-01-17 1330 479	L .02	L .02	L .02	--	--	--	--	--
83-05-24 1400 479	L .02	L .02	L .02	--	--	--	--	--
83-08-15 1415 479	L .02	L .02	L .02	--	--	--	--	--
83-10-18 1420 479	--	--	L .02	--	--	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00AL05CC0004 LAT. 52D 16M 05 LONG. 113D 51M 47S
RED DEER RIVER AT HWY 2 ABOVE RED DEER, ALBERTA

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG C.	02061L TEMP. WATER DEG C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-10 1010 479	.0	13.6	506.	479.	7.7	7.5	2.2	1.1
83-02-07 1015 479	.5	10.2	512.	460.	7.7	7.6	2.0	1.5
83-03-07 1145 479	.5	16.6	459.	463.	8.0	7.8	4.4	1.6
83-04-26 1030 479	6.0	18.6	363.	352.	8.0	8.1	112.0	76.0
83-05-16 1030 479	10.0	22.3	369.	377.	8.3	8.4	10.0	4.7
83-06-06 1015 479	13.0	20.1	358.	351.	8.2	8.5	12.0	6.8
83-07-05 1030 479	18.0	22.2	389.	376.	8.1	8.2	40.0	37.0
83-08-02 1030 479	20.0	22.0	346.	329.	8.1	8.4	2.4	1.5
83-09-06 1030 479	12.0	2.9	358.	327.	8.3	8.6	1.2	.5
83-10-03 1100 479	8.0	17.2	378.	366.	8.1	8.4	2.0	.8
83-11-02 0915 479	6.0	15.9	404.	416.	8.0	8.1	2.0	2.0
83-12-15 1245 479	.0	14.2	410.	404.	8.3	7.8	1.1	1.3

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	05717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101N OXYGEN DISSOLVED DO O2 MG/L
83-01-10 1010 479	5.	2.	--	L.001	46.	8.	420.	10.6
83-02-07 1015 479	5.	2.	--	.002	119.	6	125.	10.9
83-03-07 1145 479	L5.	2.	--	.001	47.	2.	43.	11.0
83-04-26 1030 479	20.	187.	--	.020	125.	95.	900.	10.6
83-05-16 1030 479	30.	8.	--	.005	89.	9.	55.	10.9
83-06-06 1015 479	L5.	8.	--	.004	--	10.	G800.	10.4
83-07-05 1030 479	30.	56.	--	.007	180.	140.	235.	8.1
83-08-02 1030 479	20.	5.	--	L.001	--	14.	G800.	8.5
83-09-06 1030 479	5.	1.	--	.001	--	38.	40.	9.4
83-10-03 1100 479	L5.	1. 01R	--	.001 17T	34. 02U	24. 12U	600. 03U	10.7
83-11-02 0915 479	L5.	L1.	--	.001	--	21.	40.	11.1
83-12-15 1245 479	L5.	L1.	--	L.001	L2.	L2.	990.	11.9

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-10 1010 479	0.	.0	280.	230.0	67.3	21.7	257.4	10.0
83-02-07 1015 479	0.	.0	268.	220.0	63.6	21.0	245.3	9.7
83-03-07 1145 479	0.	.0	268.	220.0	66.0	21.0	251.3	9.3
83-04-26 1030 479	0.	.0	201.	165.0	48.0	15.3	182.8	8.5
83-05-16 1030 479	1.	.9	205.	170.0	48.1	15.0	181.9	11.0
83-06-06 1015 479	4.	3.3	187.	160.0	46.0	14.7	175.4	8.1
83-07-05 1030 479	0.	.0	213.	175.0	43.0	15.4	170.8	13.0
83-08-02 1030 479	0.	.4	182.	150.0	45.0	14.2	170.8	6.0
83-09-06 1030 479	2.	1.8	185.	155.0	47.7	15.6	183.3	5.4
83-10-03 1100 479	0.	.0	201.	165.0	50.1	14.7	185.6	6.4
83-11-02 0915 479	0	.0	235.	193.0 06L	52.8	16.4	199.4	10.4
83-12-15 1245 479	0.	.0	231.	189.1 06L	51.4	16.5	196.3	6.0

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17208L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-10 1010 479	1.4	1.6	.13	45.	7.0	292.	--	--
83-02-07 1015 479	1.2	1.4	.11	46.	7.2	282.	--	--
83-03-07 1145 479	1.3	1.5	.18	44.	7.0	282.	--	--
83-04-26 1030 479	2.3	2.0	.10	28.	4.8	208.	--	--
83-05-16 1030 479	2.3	2.4	.09	24.	4.4	209.	--	--
83-06-06 1015 479	1.8	1.6	.16	24.	3.7	196.	--	--
83-07-05 1030 479	2.1	2.2	.12	20.	5.0	207.	--	--
83-08-02 1030 479	1.1	.9	.14	24.	5.0	188.	--	--
83-09-06 1030 479	1.2	1.4	.13	32.	4.3	201.	--	--
83-10-03 1100 479	1.3	1.4	.11	35.	4.2	213.	--	--
83-11-02 0915 479	1.5	2.0	.14 08L	34.	3.4 02L	236.	--	--
83-12-15 1245 479	1.2	.9	.15 08L	41.	4.1 02L	235.	--	--

STATION - 00AL05CC0004
RED DEER RIVER AT HWY 2 ABOVE RED DEER, ALBERTA LAT. 52D 18M 05 LONG. 113D 51M 47S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-10	1010	479	.003	L.003	Q.000	--	.23	.26	L.01	Q.27
83-02-07	1015	479	.010	.003	.007	--	.27	.31	L.01	Q.32
83-03-07	1145	479	.007	L.003	Q.004	--	.28	.28	L.01	Q.29
83-04-26	1030	479	.200	.005	.195	--	.25	.27	.59	.86
83-05-16	1030	479	.033	.013	.020	--	.29	.29	.07	.36
83-06-06	1015	479	.018	.009	.009	--	.17	.15	.04	.19
83-07-05	1030	479	.089	--	--	--	.34	.35	.24	.59
83-08-02	1030	479	.014	.008	.006	--	.20	.20	L.01	Q.21
83-09-06	1030	479	.011	L.003	Q.008	--	.12	.12	L.01	Q.13
83-10-03	1100	479	.008 06R	.005 03V	.003	--	.14 51V	.14 51R	.04 02R	.18
83-11-02	0915	479	.011	.005	.006	--	.13	.14	L.01	Q.15
83-12-15	1245	479	.003	L.003	L.006	--	.12	.12	L.01	Q.13

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) C MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-10	1010	479	.17	L.1	2.2	.14	2.3	.07	L.0005	L.0005
83-02-07	1015	479	.20	L.1	4.1	.18	4.3	.05	L.0005	.0005
83-03-07	1145	479	.21	L.1	2.9	.17	3.1	.03	L.0005	.0005
83-04-26	1030	479	.03	L.1	5.4	7.30	12.7	.05	L.0005	L.0005
83-05-16	1030	479	.01	L.1	7.5	.36	7.9	.02	L.0005	L.0005
83-06-06	1015	479	L.01	L.1	3.5	.26	3.8	.04	L.0005	L.0005
83-07-05	1030	479	L.01	L.1	7.7	1.90	9.6	.08	.0009	L.0005
83-08-02	1030	479	L.01	L.1	5.0	.14	5.1	.07	.0013 08D	.0002 08D
83-09-06	1030	479	L.01	L.1	2.5	.08	2.6	.05	.0007 08D	.0002 08D
83-10-03	1100	479	L.01 10R	L.1 06W	2.4 04R	.28 02R	2.7	.04 05V	.0012 08V	.0003 08V
83-11-02	0915	479	L.01	L.1	2.8	.17	3.0	.07	.0003 08D	.0003 08D
83-12-15	1245	479	.04	L.1	2.4	.09	2.5	.04	.0015 08D	.0003 08D

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-10	1010	479	--	L.004	--	L.01	--	L.04	L.02	L.001
83-02-07	1015	479	--	--	--	L.01	--	L.04	L.02	--
83-03-07	1145	479	--	--	--	L.01	--	L.04	L.02	--
83-04-26	1030	479	--	--	--	.01	--	.05	L.02	--
83-05-16	1030	479	--	L.004	--	L.01	--	.07	L.02	L.001
83-06-06	1015	479	--	--	--	.02	--	L.04	L.02	--
83-07-05	1030	479	--	--	--	L.01	--	.07	L.02	--
83-08-02	1030	479	--	L.004	--	L.01	--	L.04	L.02	.001 02P
83-09-06	1030	479	--	--	--	L.01	--	.04	L.02	--
83-10-03	1100	479	--	L.005 01W	--	L.01 04T	--	L.04 04T	L.02 11W	L.001 02W
83-11-02	0915	479	--	--	--	L.02	--	L.04	L.02	--
83-12-15	1245	479	--	--	--	L.02	--	L.04	L.02	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-10	1010	479	--	L.002	.002	L.001	.001	L.001	.11	L.004
83-06-16	1030	479	--	L.002	L.002	.002	.003	L.001	.10	L.004
83-08-02	1030	479	--	L.002 02P	.004 02P	.001 05P	.007 05P	L.001 02P	.12 01P	L.004 02P
83-10-03	1100	479	--	L.001 02W	.001 02W	.001 05W	.001 05W	L.001 02W	L.10 01W	L.001 02W

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05CC0004
RED DEER RIVER AT HWY 2 ABOVE RED DEER, ALBERTA
LAT. 52D 18M 05 LONG. 113D 51M 47S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-10 1010 479	L.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-02-07 1015 479	.003	--	--	--	--	--	--	--
83-03-07 1145 479	.004	--	--	--	--	--	--	--
83-04-26 1030 479	.002	--	--	--	--	--	--	--
83-05-16 1030 479	.004	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-06-06 1015 479	.003	--	--	--	--	--	--	--
83-07-05 1030 479	.005	--	--	--	--	--	--	--
83-08-02 1030 479	.013	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-09-06 1030 479	.003	--	--	--	--	--	--	--
83-10-03 1100 479	L.001 35W	L.001 11R	.002 75R	.001 70R	L.001 30R	L.002 10R	L.001 20R	L.001 05R
83-11-02 0915 479	.002	--	--	--	--	--	--	--
83-12-15 1245 479	.001	--	--	--	--	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-10 1010 479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-16 103C 479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-02 1030 479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-03 1100 479	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-10 1010 479	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-16 1030 479	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-02 1030 479	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-10-03 1100 479	L.001 25R	L.003 60R	L.002 65R	L.2 20W	.009 00W	L.009 50W	L.004 55W	L.002 10W

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1280 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-10 1010 479	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-05-16 1030 479	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-08-02 1030 479	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-10-03 1100 479	L.004 40W	--	--	--	--	L.002 64R	L.5 90W	L.2 85W

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18205P IMIDAN UG/L	18215P DISULFOTON UG/L	18230P CRUFOMATE UG/L	18240P PARATHION UG/L	18245P PARATHION-METHYL UG/L	18250P MALATHION UG/L	18260P FENCHLORPHOS (RONNEL) UG/L	18270P DIAZINON UG/L
83-01-10 1010 479	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-05-16 1030 479	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-08-02 1030 479	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-10-03 1100 479	L.2 05W	L.02 15W	L.2 30W	L.02 40W	L.02 45W	L.05 50W	L.02 60W	L.02 70W

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18300P PHORATE UG/L	18310P ETHION UG/L	18320P CARBO-PHENOTHION UG/L	92111P URANIUM DISSOLVED U UG/L	88502P RADIUM RADIATION RA-226 BQ/L	01502P TRITIUM RADIATION H-3 BQ/L	51501P ANTIMONY RADIATION SB-125 BQ/L	55502P CESIUM RADIATION CS-137 BQ/L
83-01-10 1010 479	L.02	L.02	L.02	--	--	--	--	--
83-05-16 1030 479	L.02	L.02	L.02	--	--	--	--	--
83-08-02 1030 479	L.02	L.02	L.02	--	--	--	--	--
83-10-03 1100 479	L.02 00W	L.02 10W	L.02 20W	--	--	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00ALOSCE0001
RED DEER RIVER AT DRUMHELLER, ALBERTA

LAT. 51D 28M 8S LONG. 112D 42M 29S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-17 1015 479	.0	22.9	591.	563	7.8	7.5	.8	1.1
83-02-21 0930 479	0	17.0	531.	524	7.9	7.5	2.4	3.0
83-03-14 1200 479	1.5	20.0	611.	605	8.3	8.0	450.0	160.0
83-04-18 0945 479	9.0	23.0	424.	394	8.6	8.4	13.0	14.0
83-05-18 1030 479	11.0	22.7	433.	426	8.5	8.6	16.0	9.8
83-06-08 1015 479	18.0	20.9	334	334	8.4	8.6	3.0	2.1
83-07-06 0905 479	20.0	21.4	438	444	8.5	8.5	120.0	80.0
83-08-04 1130 479	21.0	17.9	316	297	8.5	8.7	5.0	2.5
83-09-14 1145 479	11.5	17.0	335	333	8.5	8.5	1.8	1.6
83-10-05 1220 479	6.5	17.9	358	357	8.5	8.5	1.1	1.4
83-11-09 1035 479	2.0	10.3	399	388	8.4	8.3	1.8	1.3
83-12-15 1600 479	.0	14.2	466	459	8.1	7.7	1.0	1.9

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101M OXYGEN DISSOLVED DO O2 MG/L
83-01-17 1015 479	5.	1	--	001	97	28.	G120	5.0
83-02-21 0930 479	10.	5	--	005	810	58	110	8.8
83-03-14 1200 479	50.	308 01R	--	--	--	400 12U	27000 03U	11.6
83-04-18 0945 479	70	27	--	010	110.	4	1000	10.2
83-05-18 1030 479	40.	27	--	007	20	4	25	9.9
83-06-08 1015 479	10.	2.	--	002	--	8	95	8.9
83-07-06 0905 479	40.	212.	--	020	--	150.	1600	7.6
83-08-04 1130 479	20	7.	--	003	--	2	260	7.6
83-09-14 1145 479	L5.	3.	--	001	20	8	52	10.0
83-10-05 1220 479	L5.	1	--	L 001	4.	L2.	40	11.4
83-11-09 1035 479	5	L1	--	001	L2.	L2	179	13.1
83-12-15 1600 479	5.	9	--	001	92	6	16	10.4

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-17 1015 479	0.	0	311.	255.0	74.8	23.6	283.9	18.0
83-02-21 0930 479	0.	0	293.	240.0	69.2	22.4	265.0	17.0
83-03-14 1200 479	0	0	256	210.0	45.1	17.6	185.1	65.0
83-04-18 0945 479	4.	3.2	212	180.0	46.1	15.9	180.6	24.0
83-05-18 1030 479	6.	4.9	214.	185.0	48.0	16.0	185.7	21.0
83-06-08 1015 479	6.	4.8	159.	140.0	39.4	14.5	158.1	9.2
83-07-06 0905 479	5	4.0	216.	185.0	43.5	15.2	171.2	31.0
83-08-04 1130 479	--	--	--	--	33.7	14.2	142.6	11.0
83-09-14 1145 479	1.	1.0	174	145.0	41.3	15.8	168.2	8.4
83-10-05 1220 479	2.	1.4	186	155.0	41.8	15.6	168.6	11.0
83-11-09 1035 479	0	.0	213.	175.0 06L	48.3	16.6	188.9	13.9
83-12-15 1600 479	0.	.0	211.	172.8 06L	47.1	18.5	178.8	11.8

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-17 1015 479	2.0	4.9	17	54	7.4	338.	--	--
83-02-21 0930 479	1.7	3.7	17	50	5.5	314.	--	--
83-03-14 1200 479	6.5	5.9	12	110	6.6	383.	--	--
83-04-18 0945 479	5.9	5.0	L.05	40	5.6	251.	--	--
83-05-18 1030 479	3.1	3.7	.10	32	2.0	237.	--	--
83-06-08 1015 479	1.3	1.8	.14	34	.6	185.	--	--
83-07-06 0905 479	3.0	3.0	.14	44	4.6	255.	--	--
83-08-04 1130 479	1.5	1.6	.15	28	1.1	--	--	--
83-09-14 1145 479	1.4	2.2	.12	34.	1.2	191.	--	--
83-10-05 1220 479	1.5	2.3	.13	37.	1.0	203.	--	--
83-11-09 1035 479	1.8	2.2	.16 08L	44.	.9 02L	233.	--	--
83-12-15 1600 479	1.8	2.0	.17 08L	41	2.7 02L	223.	--	--

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05CE0001
RED DEER RIVER AT DRUMHELLER, ALBERTA

LAT. 51D 28M 8S LONG. 112D 42M 29S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-17	1015	479	.064	.060	.004	--	.77	.77	L.01	Q.78
83-02-21	0930	479	.048	.040	.008	--	.61	.65	.05	.70
83-03-14	1200	479	.360 06R	.150 03V	.210	--	1.10 51V	1.30 51R	.76 02R	2.06
83-04-18	0945	479	.098	.037	.061	--	.64	.65	.26	.91
83-05-18	1030	479	.054	.012	.042	--	.39	.41	.13	.54
83-06-08	1015	479	.015	.007	.008	--	.17	.18	.03	.21
83-07-06	0905	479	.190	.012	.178	--	.36	.37	.49	.86
83-08-04	1130	479	.017	.012	.005	--	.27	.28	.06	.34
83-09-14	1145	479	006	.004	002	--	.15	.15	.02	.17
83-10-05	1220	479	.007	I.003	Q.004	--	.17	.17	.02	.19
83-11-09	1035	479	.008	.004	004	--	.14	.15	.02	.17
83-12-15	1600	479	.016	.012	.004	--	.29	.28	L.01	Q.29

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-17	1015	479	.54	.2	3.1	.11	3.2	.09	L.0005	L.0005
83-02-21	0930	479	.56	L.1	2.7	.31	3.0	.06	L.0005	.0005
83-03-14	1200	479	.85 10R	L.1 06W	8.0 04R	5.20 02R	13.2	.10 05V	.0007 04V	L.0005 02V
83-04-18	0945	479	.14	L.1	9.6	1.60	11.2	.10	L.0005	L.0005
83-05-18	1030	479	L.01	L.1	8.8	1.10	9.9	.05	.0005	L.0005
83-06-08	1015	479	L.01	L.1	3.3	.21	3.5	L.02	L.0005	L.0005
83-07-06	0905	479	L.01	.1	6.6	4.60	11.2	.09	L.0005	L.0005
83-08-04	1130	479	L.01	L.1	6.2	.41	6.6	.05	.0017 08D	.0002 08D
83-09-14	1145	479	L.01	L.1	2.6	.18	2.8	.03	.0022 08D	.0002 08D
83-10-05	1220	479	L.01	L.1	2.6	.19	2.8	.08	.0012 08D	.0002 08D
83-11-09	1035	479	.01	L.1	2.9	.17	3.1	.04	.0006 08D	.0002 08D
83-12-15	1600	479	.16	L.1	3.2	.15	3.4	.05	.0032 08D	.0009 08D

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-17	1015	479	--	L.004	--	L.01	--	L.04	L.02	L.001
83-02-21	0930	479	--	--	--	L.01	--	L.04	L.02	--
83-03-14	1200	479	--	--	--	.05 04T	--	.08 04T	06 11W	--
83-04-18	0945	479	--	--	--	L.01	--	.10	L.02	--
83-05-18	1030	479	--	L.004	--	L.01	--	.04	L.02	.001
83-06-08	1015	479	--	--	--	L.01	--	L.04	L.02	--
83-07-06	0905	479	--	--	--	L.01	--	L.04	.03	--
83-08-04	1130	479	--	L.004	--	L.01	--	L.04	L.02	L.001 02P
83-09-14	1145	479	--	--	--	L.01	--	L.04	.02	--
83-10-05	1220	479	--	L.005	--	L.01	--	L.04	L.02	.001 02P
83-11-09	1035	479	--	--	--	L.02	--	L.04	L.02	--
83-12-15	1600	479	--	--	--	L.02	--	.16	L.02	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-17	1015	479	--	L.002	L.002	.001	L.001	L.001	.12	L.004
83-05-18	1030	479	--	L.002	L.002	.004	.006	L.001	.09	L.004
83-08-04	1130	479	--	L.002 02P	L.002 02P	L.001 05P	.002 05P	L.001 02P	.07 01P	L.004 02P
83-10-05	1220	479	--	L.001 02P	L.001 02P	.001 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P

STATION - 00AL05CE0001
RED DEER RIVER AT DRUMHELLER, ALBERTA

LAT. 51D 28M 8S LONG. 112D 42M 29S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-17 1015 479	.001	L .001	L .001	L .001	L .001	L .002	L .001	L .001
83-02-21 0930 479	.001	--	--	--	--	--	--	--
83-03-14 1200 479	.007 35W	--	--	--	--	--	--	--
83-04-18 0945 479	.005	--	--	--	--	--	--	--
83-05-18 1030 479	.004	L .001	.001	L .001	L .001	L .002	L .001	L .001
83-06-08 1015 479	.002	--	--	--	--	--	--	--
83-07-06 0905 479	.005	--	--	--	--	--	--	--
83-08-04 1130 479	.003	L .001	.002	L .001	L .001	L .002	L .001	L .001
83-09-14 1145 479	.001	--	--	--	--	--	--	--
83-10-05 1220 479	L .001	L .001	.003	.001	L .001	L .002	L .001	L .001
83-11-09 1035 479	.001	--	--	--	--	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-17 1015 479	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-05-18 1030 479	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-08-04 1130 479	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-10-05 1220 479	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-17 1015 479	L .001	L .003	L .002	L 2	L .004	L .009	L .004	L .002
83-05-18 1030 479	L .001	L .003	L .002	L 2	L .004	L .009	L .004	L .002
83-08-04 1130 479	L .001	L .003	L .002	L 2	L .004	L .009	L .004	L .002
83-10-05 1220 479	L .001	L .003	L .002	L 2	L .004	L .009	L .004	L .002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-17 1015 479	L .004	--	L .002	L .002	L .005	L .002	L 5	L 2
83-05-18 1030 479	L .004	--	L .002	L .002	L .005	L .002	L 5	L 2
83-08-04 1130 479	L .004	--	L .002	L .002	L .005	L .002	L 5	L 2
83-10-05 1220 479	L .004	--	--	--	--	L .002	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18205P IMIDAN UG/L	18215P DISULFOTON UG/L	18230P CRUFOMATE UG/L	18240P PARATHION UG/L	18245P PARATHION-METHYL UG/L	18250P MALATHION UG/L	18260P FENCHLORPHOS (RONNEL) UG/L	18270P DIAZINON UG/L
83-01-17 1015 479	L .2	L .02	L .2	L .02	L .02	L .05	L .02	L .02
83-05-18 1030 479	L .2	L .02	L .2	L .02	L .02	L .05	L .02	L .02
83-08-04 1130 479	L .2	L .02	L .2	L .02	L .02	L .05	L .02	L .02
83-10-05 1220 479	--	--	L .2	L .02	L .02	--	L .02	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18300P PHORATE UG/L	18310P ETHION UG/L	18320P CARBO-PHENOTHION UG/L	92111P URANIUM DISSOLVED U UG/L	88502P RADIUM RADIATION RA-226 BQ/L	01502P TRITIUM RADIATION H-3 BQ/L	51501P ANTIMONY RADIATION SB-125 BQ/L	55502P CESIUM RADIATION CS-137 BQ/L
83-01-17 1015 479	L .02	L .02	L .02	--	--	--	--	--
83-05-18 1030 479	L .02	L .02	L .02	--	--	--	--	--
83-08-04 1130 479	L .02	L .02	L .02	--	--	--	--	--
83-10-05 1220 479	--	--	L .02	--	--	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05CK0001
RED DEER RIVER AT BINDLOSS, ALBERTA

LAT. 50D 54M 10S LONG. 110D 17M 48S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-18 1045 462	.0	21.8	686.	638.	7.7	7.7	2.2	2.0
83-02-22 1115 462	1.0	26.2	592.	586.	7.7	7.8	13.5	26.0
83-03-15 1045 462	.5	19.4	442.	424.	8.1	8.0	G1000.0	250.0
83-04-19 0950 462	12.2	17.0	445.	430.	8.4	8.2	58.0	48.0
83-05-17 1112 462	13.0	21.8	462.	463.	8.2	8.2	39.0	32.0
83-06-07 1048 462	17.0	22.0	--	453.	8.3	8.3	64.0	46.0
83-07-12 1135 462	19.5	11.2	420.	442.	8.1	8.1	1700.0	235.0
83-08-17 1122 462	21.0	22.9	403.	372.	8.3	8.2	26.0	45.0
83-09-13 1238 462	12.0	19.8	413.	391.	8.3	7.9	38.0	31.0
83-10-11 1118 462	5.5	17.7	448.	425.	8.4	8.3	20.0	10.0
83-11-08 1348 462	2.5	18.5	487.	486.	8.3	8.2	12.0	5.4
83-12-13 1045 462	.0	12.2	639.	643.	8.3	8.0	5.0	3.5

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED BD O2 MG/L
83-01-18 1045 462	10.	2.	1.	.001	93.	L1.	--	6.4
83-02-22 1115 462	50.	35.	31.	.006	20.	4.	--	10.2
83-03-15 1045 462	60.	528.	486.	--	L100.	40.	--	12.7
83-04-19 0950 462	100.	104.	94.	.030	10.	L10.	--	9.7
83-05-17 1112 462	30.	65.	58.	.010	4.	4.	--	8.4
83-06-07 1048 462	20.	99.	91.	L.001	16.	10.	--	8.8
83-07-12 1135 462	50.	3140.	2860.	.200	2200.	1000.	--	7.0
83-08-17 1122 462	30.	114.	103.	.010	50.	44.	--	7.7
83-09-13 1238 462	20.	54.	49.	.020	--	14.	--	10.3
83-10-11 1118 462	10.	27.	24.	.007	60.	16.	--	11.4
83-11-08 1348 462	10.	9.	6.	.002	L2.	L2.	--	12.5
83-12-13 1045 462	L5.	12.	11.	.002	4.	L2.	--	9.9

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-18 1045 462	0.	.0	354.	290.0	74.8	27.7	300.8	30.0
83-02-22 1115 462	0.	.0	238.	195.0	56.9	21.0	228.5	36.0
83-03-15 1045 462	0.	.0	146.	120.0	35.1	12.5	139.1	42.0
83-04-19 0950 462	0.	.0	207.	170.0	42.5	15.5	169.9	31.0
83-05-17 1112 462	0.	.0	219.	180.0	47.1	17.0	187.6	25.0
83-06-07 1048 462	0.	.0	201.	165.0	48.5	17.4	192.7	23.0
83-07-12 1135 462	0.	.0	213.	175.0	39.0	14.4	156.7	35.0
83-08-17 1122 462	0.	.0	165.	135.0	39.2	14.2	156.3	17.0
83-09-13 1238 462	0.	.0	171.	140.0	41.1	17.0	172.6	18.0
83-10-11 1118 462	0.	.0	189.	155.0	44.3	18.5	186.8	17.0
83-11-08 1348 462	0.	.0	243.	199.0 08L	51.8	19.6	210.0	31.0
83-12-13 1045 462	0.	.0	269.	221.0 08L	76.0	27.0	300.9	30.0

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-18 1045 462	2.4	6.5	.13	74.	6.2	396.	L1.	.003
83-02-22 1115 462	5.8	6.7	.16	108.	4.8	356.	L1.	.006
83-03-15 1045 462	3.5	5.5	.06	98.	3.8	272.	L1.	.005
83-04-19 0950 462	7.3	6.2	.08	54.	7.0	266.	--	.008
83-05-17 1112 462	3.7	4.2	.11	56.	3.6	265.	--	.002
83-06-07 1048 462	2.8	3.3	.17	68.	4.0	266.	--	.003
83-07-12 1135 462	3.9	3.1	.18	45.	9.0	254.	--	.009
83-08-17 1122 462	2.3	3.5	.13	49.	3.4	210.	--	.004
83-09-13 1238 462	1.8	3.7	.12	59.	1.8	226.	--	.002
83-10-11 1118 462	1.8	4.8	.14	62.	1.3	243.	--	.002
83-11-08 1348 462	2.0	4.3	.16 08L	71.	1.2 02L	300.	--	.002
83-12-13 1045 462	2.6	6.3	.17 08L	92.	2.2 02L	369.	--	.002

STATION - 00AL05CK0001
RED DEER RIVER AT BINDLOSS, ALBERTA

LAT. 500 54M 10S LONG. 1100 17M 48S

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-18	1045		462	012	006	006	L 003	67	66	04	70
83-02-22	1115		462	110	059	051	043	1 00	1 00	23	1 23
83-03-15	1045		462	340	025	315	L 003	65	56	1 20	1 76
83-04-19	0950		462	160	027	133	003	1 10	1 10	52	1 62
83-05-17	1112		462	081	008	073	L 003	27	27	10	37
83-06-07	1048		462	100	022	078	L 003	22	23	21	44
83-07-12	1135		462	2 700	015	2 685	L 003	64	74	3 20	3 94
83-08-17	1122		462	110	007	103	L 003	23	23	36	59
83-09-13	1238		462	055	L 003	Q 052	L 003	17	18	18	36
83-10-11	1118		462	035	009	026	L 003	18	18	15	33
83-11-08	1348		462	017	005	012	L 003	14	15	05	20
83-12-13	1045		462	005	L 003	Q 002	005	17	17	04	21

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-18	1045		462	48	L 1	3 6	32	3 9	09	L 0005	L 0005
83-02-22	1115		462	64	1	6 1	1 40	7 5	10	0005	L 0005
83-03-15	1045		462	27	L 1	5 8	7 50	13 3	04	L 0005	L 0005
83-04-19	0950		462	52	L 1	11 0	3 30	14 3	13	L 0005	L 0005
83-05-17	1112		462	L 01	L 1	7 2	75	8 0	07	L 0005	L 0005
83-06-07	1048		462	L 01	L 1	4 4	2 00	6 4	02	L 0005	L 0005
83-07-12	1135		462	48	1	7 4	41 00	48 4	12	0007	0005
83-08-17	1122		462	01	L 1	4 5	2 80	7 3	06	0013 08D	0002 08D
83-09-13	1238		462	01	L 1	3 2	1 30	4 5	04	0015 08D	0002 08D
83-10-11	1118		462	L 01	L 1	2 4	96	3 4	06	0023 08D	L 0001 08D
83-11-08	1348		462	L 01	L 1	3 8	34	4 1	04	0021 08D	0002 08D
83-12-13	1045		462	02	L 1	4 4	29	4 7	06	0021 08D	0002 08D

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-18	1045		462	08	--	--	L 01	--	L 04	L 02	L 001
83-02-22	1115		462	64	--	--	L 01	--	L 04	L 02	002
83-03-15	1045		462	--	--	--	01	--	15	06	023
83-04-19	0950		462	52	--	--	01	--	06	L 02	005
83-05-17	1112		462	20	--	--	L 01	--	L 04	L 02	003
83-06-07	1048		462	47	--	--	08	--	L 04	L 02	006
83-07-12	1135		462	7 30	--	--	08	--	L 04	L 02	022
83-08-17	1122		462	2 00	--	--	12	--	05	L 02	004 02P
83-09-13	1238		462	52	--	--	09	--	L 04	L 02	002 02P
83-10-11	1118		462	28	--	--	10	--	L 04	18	002 02P
83-11-08	1348		462	17	--	--	06	--	L 04	L 02	002 02P
83-12-13	1045		462	11	--	--	L 02	--	L 04	L 02	001 02P

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-18	1045		462	L 015	L 002	L 002	L 001	L 001	L 001	15	L 004
83-02-22	1115		462	L 015	L 002	L 002	004	010	L 001	12	L 004
83-03-15	1045		462	--	005	007	013	--	L 001	18	006
83-04-19	0950		462	L 015	L 002	005	005	--	L 001	09	L 004
83-05-17	1112		462	L 015	L 002	L 002	006	006	L 001	10	L 004
83-06-07	1048		462	L 015	L 002	004	008	012	L 001	L 05	L 004
83-07-12	1135		462	L 015	035	120	071	290	L 001	1 10	034
83-08-17	1122		462	--	001 02P	007 02P	006 05P	014 05P	L 001 02P	10 01P	001 02P
83-09-13	1238		462	--	L 001 02P	003 02P	003 05P	004 05P	L 001 02P	11 01P	L 001 02P
83-10-11	1118		462	002 03P	L 001 02P	002 02P	003 05P	L 001 05P	L 001 02P	18 01P	001 02P
83-11-08	1348		462	001 03P	L 001 02P	L 001 02P	002 05P	002 05P	L 001 02P	12 01P	001 02P
83-12-13	1045		462	L 001 03P	L 001 02P	002 02P	002 05P	002 05P	L 001 02P	12 01P	L 001 02P

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05CK0001
RED DEER RIVER AT BINDLOSS, ALBERTA

LAT. 50D 54M 10S LONG. 110D 17M 48S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-18	1045	462	.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-02-22	1115	462	.008	L.001	.003	.001	L.001	L.002	L.001	L.001
83-03-15	1045	462	.005	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-04-19	0950	462	.006	L.001	001	L.001	L.001	L.002	L.001	L.001
83-05-17	1112	462	.003	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-06-07	1048	462	.005	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-07-12	1135	462	.008	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-08-17	1122	462	.003	L.001	002	L.001	L.001	L.002	L.001	L.001
83-09-13	1238	462	.003	L.001	004	.001	L.001	L.002	L.001	L.001
83-10-11	1118	462	002	L.001	008	.001	L.001	L.002	L.001	L.001
83-11-08	1348	462	.002	L.001	007	L.001	L.001	L.002	L.001	L.001
83-12-13	1045	462	--	L.001	.003	L.001	L.001	L.002	L.001	L.001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-18	1045	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-02-22	1115	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-15	1045	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-19	0950	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-17	1112	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-07	1048	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-12	1135	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-17	1122	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-13	1238	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-11	1118	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-11-08	1348	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-12-13	1045	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-18	1045	462	L.001	L.003	L.002	L.2	.006	L.009	L.004	L.002
83-02-22	1115	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-15	1045	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-04-19	0950	462	L.001	L.003	L.002	--	--	--	--	--
83-05-17	1112	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-06-07	1048	462	L.001	L.003	L.002	L.2	020	L.009	L.004	L.002
83-07-12	1135	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-17	1122	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-09-13	1238	462	L.001	L.003	L.002	L.2	.011	.009	L.004	L.002
83-10-11	1118	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-11-08	1348	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-12-13	1045	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-18	1045	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-02-22	1115	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-03-15	1045	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-04-19	0950	462	--	--	L.002	L.002	L.005	L.002	--	--
83-05-17	1112	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-06-07	1048	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-07-12	1135	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-08-17	1122	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-09-13	1238	462	L.004	--	--	--	--	L.002	--	--
83-10-11	1118	462	L.004	--	--	--	--	L.002	--	--
83-11-08	1348	462	L.004	--	--	--	--	L.002	--	--
83-12-13	1045	462	L.004	--	--	--	--	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00AL05DA0001
NORTH SASKATCHEWAN RIVER AT WHIRLPOOL POINT, ALBERTA LAT 52D 0M 10S LONG. 118D 28M 18S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-11	1110	417	1.0	8.7	286.	286.	8.1	8.0	8.	1.1
83-02-15	1045	417	1.0	15.2	284.	282.	8.2	8.0	.5	1.0
83-03-08	1100	417	.0	17.4	292.	284.	8.0	8.1	.4	.9
83-04-12	1020	417	1.5	23.5	296.	288.	8.1	8.0	.6	1.0
83-05-03	1000	417	5.5	15.2	280.	269.	8.3	8.1	1.2	1.5
83-06-07	0840	417	7.5	15.2	195.	201.	8.3	8.2	22.0	24.0
83-07-04	0920	417	9.0	20.3	163.	168.	8.2	8.2	99.0	72.0
83-08-09	1045	417	8.5	22.9	141.	139.	--	8.3	--	87.0
83-09-13	0935	417	5.5	20.1	190.	194.	8.2	8.1	5.4	7.7
83-10-04	0920	417	4.0	11.5	221.	212.	8.2	8.3	2.4	1.8
83-11-07	1120	417	2.0	14.4	243.	243.	8.0	8.1	2.4	1.3
83-12-13	0910	417	.5	4.3	274.	276.	8.3	7.7	1.6	1.4

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-11	1110	417	L5.	1.	--	L.001	L1	L1	9.	11.7
83-02-15	1045	417	5.	1.	--	L.001	L1	L1.	3.	11.8
83-03-08	1100	417	L5	L1.	--	.003	L1	L1.	L1.	12.0
83-04-12	1020	417	5.	1	--	001	65.	L1	2.	11.8
83-05-03	1000	417	L5.	3.	--	L.001	--	1.	26.	10.5
83-06-07	0840	417	L5.	37	--	.002	--	16.	22.	10.5
83-07-04	0920	417	5.	75. 01R	--	L.001 17T	2. 02U	L2 12U	28. 03U	10.0
83-08-09	1045	417	5.	86.	--	L.001	L2	L2	10.	10.7
83-09-13	0935	417	L5.	5.	--	.001	2.	L1.	13.	10.5
83-10-04	0920	417	L5.	1.	--	L.001	3.	L1.	2.	10.9
83-11-07	1120	417	L5	L1	--	L.001	L2	L2.	L2.	11.9
83-12-13	0910	417	L5.	1.	--	L.001	L1.	L1.	3.	11.8

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-11	1110	417	0.	.0	134.	110.0	37.1	14.3	151.5	1.2
82-02-15	1045	417	--	0	--	--	36.2	14.6	150.5	.9
83-03-08	1100	417	0.	0	134.	110.0	37.8	15.2	157.0	1.0
83-04-12	1020	417	0.	.0	134.	110.0	37.7	15.4	157.5	1.3
83-05-03	1000	417	0.	.0	128.	105.0	36.7	14.3	150.5	1.2
83-06-07	0840	417	0.	.0	106.	87.0	26.0	8.6	100.3	.7
83-07-04	0920	417	0.	.0	98.	80.0	22.3	6.3	81.6	.6
83-08-09	1045	417	0.	.0	90.	74.0	19.9	5.0	70.3	.4
83-09-13	0935	417	0.	0	94.	77.0	26.0	8.8	101.2	.6
83-10-04	0920	417	0	.0	107.	88.0	29.0	9.5	111.5	.7
83-11-07	1120	417	0	0	113.	93.0 08L	33.0	11.4	129.3	.8
83-12-13	0910	417	0.	0	127	104.0 08L	36.3	13.6	146.6	1.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-11	1110	417	.4	.6	.07	41.	3.6	164.	--	--
83-02-15	1045	417	.4	.5	L.05	42.	3.8	--	--	--
83-03-08	1100	417	.4	.5	.09	42.	3.8	167.	--	--
83-04-12	1020	417	.4	.6	.05	46.	3.8	171.	--	--
83-05-03	1000	417	.4	.5	.07	44.	3.6	164.	--	--
83-06-07	0840	417	.3	.4	.10	17.	2.6	108.	--	--
83-07-04	0920	417	.3	.3	.06	13.	2.2	93.	--	--
83-08-09	1045	417	.2	.3	L.05	9.	1.5	81.	--	--
83-09-13	0935	417	.2	.3	.06	21.	2.3	105.	--	--
83-10-04	0920	417	.3	4	L.05	30.	2.9	126.	--	--
83-11-07	1120	417	.3	.4	.07 08L	36.	2.9 02L	141.	--	--
83-12-13	0910	417	.3	.5	.07 08L	39.	3.3 02L	157.	--	--

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05DA0001
NORTH SASKATCHEWAN RIVER AT WHIRLPOOL POINT, ALBERTA LAT. 52D 0M 10S LONG. 116D 28M 18S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-11	1110	417	077	L.003	Q.074	--	10	.10	L.01	Q.11
83-02-15	1045	417	.006	.006	.000	--	.09	.11	L.01	Q.12
83-03-08	1100	417	L.003	L.003	Q.000	--	.11	.11	L.01	Q.12
83-04-12	1020	417	.003	L.003	Q.000	--	.10	.13	L.01	Q.14
83-05-03	1000	417	L.003	L.003	Q.000	--	.11	.11	L.01	Q.12
83-06-07	0840	417	.023	.010	.013	--	.09	.08	L.01	Q.09
83-07-04	0920	417	.030 08R	L.003 03V	Q.027	--	.07 51V	.06 51R	L.01 02R	Q.07
83-08-09	1045	417	.056	L.003	Q.053	--	.04	.05	L.01	Q.06
83-09-13	0835	417	.004	L.003	Q.001	--	.07	.08	L.01	Q.09
83-10-04	0920	417	.003	L.003	Q.000	--	.08	.10	L.01	Q.11
83-11-07	1120	417	.004	L.003	Q.001	--	.08	.11	L.01	Q.12
83-12-13	0910	417	L.003	L.003	Q.000	--	.12	.13	L.01	Q.14

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-11	1110	417	.10	L.1	.3	.10	.4	.04	L.0005	L.0005
83-02-15	1045	417	.08	L.1	.4	.05	.5	.02	L.0005	L.0005
83-03-08	1100	417	.11	L.1	.5	.04	.5	L.02	L.0005	L.0005
83-04-12	1020	417	.10	L.1	.4	.01	.4	.03	L.0005	L.0005
83-05-03	1000	417	.10	L.1	.7	L.01	Q.7	.02	L.0005	L.0005
83-06-07	0840	417	.08	L.1	.4	.13	.5	L.02	L.0005	L.0005
83-07-04	0920	417	.05 10R	L.1 06W	.2 04R	.18 02R	.4	L.02 05V	L.0005 04V	L.0005 02V
83-08-09	1045	417	.04	L.1	.5	.18	.7	L.02	.0004 08D	L.0001 08D
83-09-13	0835	417	.06	L.1	.2	.20	.4	.02	.0008 08D	L.0001 08D
83-10-04	0920	417	.07	L.1	.4	.17	.6	.02	.0010 08D	L.0001 08D
83-11-07	1120	417	.08	L.1	1.1	05	1.2	.03	.0006 08D	.0002 08D
83-12-13	0910	417	.10	L.1	.5	.02	.5	.03	.0006 08D	L.0001 08D

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-11	1110	417	--	--	--	L.01	--	L.04	.06	--
83-02-15	1045	417	--	--	--	L.01	--	L.04	L.02	--
83-03-08	1100	417	--	--	--	L.01	--	L.04	L.02	--
83-04-12	1020	417	--	--	--	L.01	--	L.04	L.02	--
83-05-03	1000	417	--	--	--	L.01	--	L.04	L.02	--
83-06-07	0840	417	--	--	--	L.01	--	L.04	L.02	--
83-07-04	0920	417	--	--	--	L.01 04T	--	L.04 04T	L.02 11W	--
83-08-09	1045	417	--	--	--	L.01	--	L.04	L.02	--
83-09-13	0835	417	--	--	--	L.01	--	L.04	L.02	--
83-10-04	0920	417	--	--	--	L.01	--	L.04	L.02	--
83-11-07	1120	417	--	--	--	L.02	--	L.04	L.02	--
83-12-13	0910	417	--	--	--	L.02	--	L.04	L.02	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 05AL058F0008 LAT. 53D 22M 8S LONG. 113D 45M 5S
NORTH SASKATCHEWAN RIVER AT DEVON, ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-10	1330	479	.0	13.2	314.	295.	7.9	7.9	3.8	3.5
83-02-07	1315	479	.0	10.3	346.	322.	7.9	8.0	2.0	1.5
83-03-07	1500	479	.0	17.2	291.	293.	8.1	7.9	2.4	.9
83-04-26	1315	479	7.0	18.5	308.	293.	7.9	8.1	112.0	62.0
83-05-16	1400	479	11.0	21.8	309.	313.	8.3	8.2	22.0	9.5
83-06-06	1315	479	15.5	20.4	330.	326.	8.0	8.3	22.0	16.0
83-07-05	1300	479	19.5	22.8	317.	312.	8.0	8.3	94.0	62.0
83-08-02	1330	479	23.0	21.3	367.	348.	8.2	8.4	5.0	2.3
83-09-06	1330	479	13.0	4.1	314.	298.	8.2	8.5	2.2	1.2
83-10-05	0815	479	7.5	16.4	303.	293.	8.1	8.2	3.5	2.1
83-11-02	1210	479	5.0	15.4	298.	289.	8.0	8.1	8.0	4.0
83-12-14	1050	479	0	6.7	322.	316.	8.3	8.0	1.5	3.3

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-10	1330	479	5.	4. 01R	--	.001 17T	L2. 02U	L2. 12U	106. 03U	13.5
83-02-07	1315	479	10.	4.	--	.001	4.	L2.	60.	12.7
83-03-07	1500	479	L5.	3.	--	L.001	10.	10.	280.	12.0
83-04-26	1315	479	20.	285.	--	L.001	20.	L2.	20.	10.9
83-05-16	1400	479	10.	19.	--	.001	L2.	L2.	16.	11.0
83-06-06	1315	479	L5.	16.	--	L.001	--	7.	60.	9.9
83-07-05	1300	479	40.	122.	--	.007	200.	95.	445.	8.4
83-08-02	1330	479	10.	5.	--	L.001	--	16.	370.	7.4
83-09-06	1330	479	5.	3.	--	.001	--	2.	20.	9.2
83-10-05	0815	479	L5.	4.	--	L.001	40.	L2.	180.	10.5
83-11-02	1210	479	L5.	1.	--	.002	20.	L2.	19.	12.2
83-12-14	1050	479	5.	L1.	--	.001	4.	L2.	200.	13.5

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-10	1330	479	0.	.0	152.	125.0	44.2	12.5	161.8	3.5
83-02-07	1315	479	0.	0	171.	140.0	46.3	13.7	172.0	4.3
83-03-07	1500	479	0	0	146.	120.0	42.0	12.4	155.9	3.2
83-04-26	1315	479	0.	0	146.	120.0	42.0	12.5	156.3	3.6
83-05-16	1400	479	0.	.0	152.	125.0	41.8	12.5	155.8	4.2
83-06-06	1315	479	0	.0	158.	130.0	44.6	13.7	167.8	3.7
83-07-05	1300	479	0.	.0	158.	130.0	41.6	11.5	151.2	5.4
83-08-02	1330	479	1.	1.1	174.	145.0	48.1	14.1	178.2	5.8
83-09-06	1330	479	0.	.4	151.	125.0	42.3	13.0	159.1	3.1
83-10-05	0815	479	0.	.0	146.	120.0	40.2	11.1	146.1	3.2
83-11-02	1210	479	0.	0	145.	119.0 06L	40.9	11.6	149.9	3.2
83-12-14	1050	479	0.	0	168.	138.0 06L	45.9	13.1	168.5	3.1

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-10	1330	479	.7	5	10	36.	4.3	177.	--	--
83-02-07	1315	479	.7	.6	.10	40.	4.9	195.	--	--
83-03-07	1500	479	.7	6	.10	36.	4.0	171.	--	--
83-04-26	1315	479	.8	.6	.08	36.	4.2	172.	--	--
83-05-16	1400	479	.8	.9	.10	34.	4.4	174.	--	--
83-06-06	1315	479	.8	.7	.15	40.	4.2	188.	--	--
83-07-05	1300	479	1.2	.9	.10	28.	5.8	172.	--	--
83-08-02	1330	479	1.0	.8	.14	39.	5.1	201.	--	--
83-09-06	1330	479	.6	.6	.10	36.	3.1	174.	--	--
83-10-05	0815	479	.6	.6	.06	39.	2.7	169.	--	--
83-11-02	1210	479	.6	.6	.11 08L	37.	3.1 02L	158.	--	--
83-12-14	1050	479	.7	.5	.11 08L	41.	3.6 02L	191.	--	--

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05DF0008
NORTH SASKATCHEWAN RIVER AT DEVON. ALBERTA LAT. 53D 22M 8S LONG. 113D 45M 5S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-10 1330 479	.009 06R	L.003 03V	Q.006	--	.11 51V	.11 51R	L.01 02R	Q.12
83-02-07 1315 479	007	L.003	Q.004	--	.11	.12	L.01	Q.13
83-03-07 1500 479	.006	.003	.003	--	.19	.17	L.01	Q.18
83-04-26 1315 479	.230	L.003	Q.227	--	.14	.14	.32	.46
83-05-16 1400 479	024	.010	.014	--	.11	.12	.05	.17
83-06-06 1315 479	021	.016	.005	--	.08	.09	L.01	Q.10
83-07-05 1300 479	.120	.007	.113	--	.24	.24	.16	.40
83-08-02 1330 479	.012	.008	.004	--	.14	.14	L.01	Q.15
83-09-06 1330 479	.022	.003	.019	--	.06	.06	L.01	Q.07
83-10-05 0815 479	008	005	.003	--	.06	.05	L.01	Q.06
83-11-02 1210 479	006	L.003	Q.003	--	05	.05	L.01	Q.06
83-12-14 1050 479	L.002	L.003	L.006	--	.11	.11	L.01	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-10 1330 479	.07 10R	L.1 06W	1.8 04R	.22 02R	2.0	.04 05V	L.0005 04V	L.0005 02V
83-02-07 1315 479	.07	L.1	3.3	L.01	Q3.3	.02	L.0005	L.0005
83-03-07 1500 479	.09	L.1	1.6	.20	1.8	L.02	L.0005	L.0005
83-04-26 1315 479	.04	L.1	3.2	8.60	11.8	.03	L.0005	L.0005
83-05-16 1400 479	.02	L.1	3.4	.34	3.7	.04	L.0005	L.0005
83-06-06 1315 479	.02	L.1	2.1	1.10	3.2	.03	L.0005	L.0005
83-07-05 1300 479	.01	L.1	6.6	2.00	8.6	.08	L.0005	L.0005
83-08-02 1330 479	L.01	L.1	4.0	.15	4.2	.06	.0009 08D	.0001 08D
83-09-06 1330 479	L.01	L.1	1.6	.07	1.7	.03	.0005 08D	.0001 08D
83-10-05 0815 479	L.01	L.1	1.0	.20	1.2	.04	.0015 08D	.0001 08D
83-11-02 1210 479	L.01	L.1	1.2	.25	1.5	.02	.0006 08D	.0002 08D
83-12-14 1050 479	.06	L.1	1.9	.10	2.0	.05	.0015 08D	.0002 08D

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-10 1330 479	--	L.004 01W	--	L.01 04T	--	L.04 04T	L.02 11W	L.001 20W
83-02-07 1315 479	--	--	--	L.01	--	L.04	L.02	--
83-03-07 1500 479	--	--	--	L.01	--	L.04	L.02	--
83-04-26 1315 479	--	--	--	L.01	--	L.04	L.02	--
83-05-16 1400 479	--	L.004	--	L.01	--	L.04	L.02	L.001
83-06-06 1315 479	--	--	--	L.01	--	L.04	L.02	--
83-07-05 1300 479	--	--	--	L.01	--	L.04	L.02	--
83-08-02 1330 479	--	L.004	--	L.01	--	L.04	L.02	L.001 02P
83-09-06 1330 479	--	--	--	L.01	--	L.04	L.02	--
83-10-05 0815 479	--	L.005	--	L.01	--	L.04	L.02	L.001 02P
83-11-02 1210 479	--	--	--	L.02	--	L.04	L.02	--
83-12-14 1050 479	--	--	--	L.02	--	L.04	L.02	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-10 1330 479	--	L.002 20W	L.002 20W	.001 20W	.001 20W	L.001 20W	.06 20W	L.004 20W
83-06-16 1400 479	--	L.002	.003	L.001	.006	L.001	L.05	L.004
83-08-02 1330 479	--	L.002 02P	L.002 02P	.003 05P	.004 05P	L.001 02P	.10 01P	L.004 02P
83-10-05 0815 479	--	L.001 02P	.002 02P	.003 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P

STATION - 00AL05BF0008
NORTH SASKATCHEWAN RIVER AT DEVON, ALBERTA LAT. 53D 22M 8S LONG 113D 45M 5S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-10	1330	479	.001 35W	L.001 11R	.002 75R	L.001 70R	L.001 30R	L.002 10R	L.001 20R	L.001 05R
83-02-07	1315	479	.002	--	--	--	--	--	--	--
83-03-07	1500	479	.002	--	--	--	--	--	--	--
83-04-28	1315	479	.002	--	--	--	--	--	--	--
83-05-16	1400	479	.002	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-06-06	1315	479	.001	--	--	--	--	--	--	--
83-07-05	1300	479	.004	--	--	--	--	--	--	--
83-08-02	1330	479	.003	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-10-05	0815	479	L.001	L.001	.001	.001	L.001	L.002	L.001	L.001
83-11-02	1210	479	.006	--	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-10	1330	479	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R
83-05-16	1400	479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-02	1330	479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-05	0815	479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-10	1330	479	L.001 25R	L.003 60R	L.002 65R	L.2 20W	L.004 00W	L.009 50W	L.004 55W	L.002 10W
83-05-16	1400	479	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-02	1330	479	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-10-05	0815	479	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1280 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-10	1330	479	L.004 40W	--	L.002 59R	L.002 60R	L.005 62R	L.002 64R	L.5 90W	L.2 95W
83-05-16	1400	479	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-08-02	1330	479	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-10-05	0815	479	L.004	--	--	--	--	L.002	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18205P IMIDAN UG/L	18215P DISULFOTON UG/L	18230P CRUFOMATE UG/L	18240P PARATHION UG/L	18245P PARATHION-METHYL UG/L	18250P MALATHION UG/L	18260P FENCHLORPHOS (RONNEL) UG/L	18270P DIAZINON UG/L
83-01-10	1330	479	L.2 05W	L.02 15W	L.2 30W	L.02 40W	L.02 45W	L.05 50W	L.02 60W	L.02 70W
83-05-16	1400	479	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-08-02	1330	479	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-10-05	0815	479	--	--	L.2	L.02	L.02	--	L.02	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18300P PHORATE UG/L	18310P ETHION UG/L	18320P CARBO-PHENOTHION UG/L	92111P URANIUM DISSOLVED U UG/L	88502P RADIUM RADIATION RA-228 BQ/L	01502P TRITIUM RADIATION H-3 BQ/L	51501P ANTIMONY RADIATION SB-125 BQ/L	55502P CESIUM RADIATION CS-137 BQ/L
83-01-10	1330	479	L.02 00W	L.02 10W	L.02 20W	--	--	--	--	--
83-05-16	1400	479	L.02	L.02	L.02	--	--	--	--	--
83-08-02	1330	479	L.02	L.02	L.02	--	--	--	--	--
83-10-05	0815	479	--	--	L.02	--	--	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00AL05EC0005 LAT. 54D 0M 10S LONG. 112D 23M 53S
NORTH SASKATCHEWAN RIVER AT PAKAN, ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C	02061L TEMP. WATER DEG. C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-11	1315	479	.0	10.3	336.	300.	7.8	7.9	3.2	2.2
83-02-08	1300	479	.0	19.1	362.	343.	7.9	7.8	5.0	3.4
83-03-08	1230	479	1.0	18.7	312.	315.	8.0	7.8	5.2	2.5
83-04-27	1230	479	6.0	20.0	--	308.	8.5	8.1	82.0	60.0
83-05-17	1230	479	11.0	22.2	327.	331.	8.0	8.2	26.0	--
83-06-07	1230	479	15.0	20.2	343.	340.	8.0	8.2	40.0	31.0
83-07-06	1115	479	20.0	21.2	346.	340.	7.7	7.9	160.0	120.0
83-08-03	0900	479	22.0	22.6	403.	385.	8.5	8.8	5.0	2.6
83-09-07	1230	479	13.0	5.3	347.	313.	8.5	8.7	3.0	1.6
83-10-04	1300	479	8.0	18.4	329.	319.	8.3	8.5	2.5	1.4
83-11-03	0900	479	4.5	14.8	326.	322.	7.9	7.9	6.0	2.0
83-12-15	0830	479	.0	10.3	369.	358.	7.9	7.6	2.3	2.2

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-11	1315	479	5.	3.	--	.002	2200.	1025.	190.	12.6
83-02-08	1300	479	10.	5.	--	.002	2200.	445.	118.	11.8
83-03-08	1230	479	10.	7.	--	.002	6400.	670.	180.	11.5
83-04-27	1230	479	10.	159.	--	.010	4900.	680.	535.	11.1
83-05-17	1230	479	20.	35.	--	.004	700.	40.	50.	10.4
83-06-07	1230	479	5.	44.	--	.004	G800.	305.	410.	9.2
83-07-06	1115	479	70.	260.	--	.020	--	80.	1480.	7.1
83-08-03	0900	479	30.	6. 01R	--	.020 17T	200. 02U	10. 12U	365. 03U	8.3
83-09-07	1230	479	5.	3.	--	.006	500.	6.	1240.	9.5
83-10-04	1300	479	L5.	2.	--	.006	100.	L10.	35.	11.2
83-11-03	0900	479	L5.	L1.	--	.020	1100.	105.	70.	11.2
83-12-15	0830	479	L5.	4	--	.001	1700.	200.	140.	11.2

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-11	1315	479	0.	.0	158.	130.0	47.5	13.5	174.4	5.1
83-02-08	1300	479	0.	.0	177.	145.0	49.9	14.6	184.7	6.7
83-03-08	1230	479	0.	.0	158.	130.0	43.8	12.9	162.5	6.2
83-04-27	1230	479	0.	.0	146.	120.0	43.0	12.6	159.2	5.0
83-05-17	1230	479	0.	.0	152.	125.0	43.1	12.7	159.9	5.7
83-06-07	1230	479	0.	.0	158.	130.0	42.8	13.2	161.2	5.1
83-07-06	1115	479	0.	.0	158.	130.0	41.1	11.9	151.6	11.0
83-08-03	0900	479	7.	6.0	174.	155.0	50.8	14.9	188.2	11.0
83-09-07	1230	479	3.	2.8	146.	125.0	43.8	13.8	166.2	6.9
83-10-04	1300	479	3.	2.4	140.	120.0	41.6	11.9	152.9	7.1
83-11-03	0900	479	0.	.0	152.	125.0 06L	42.9	12.2	157.3	6.6
83-12-15	0830	479	0.	.0	147.	121.0 06L	46.3	13.3	170.4	6.7

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-11	1315	479	1.0	1.8	.13	40.	4.5	192	--	--
83-02-08	1300	479	1.0	2.2	.12	42.	5.2	209.	--	--
83-03-08	1230	479	.9	2.5	.11	40.	4.2	189.	--	--
83-04-27	1230	479	1.1	1.5	L.05	36.	4.2	175.	--	--
83-05-17	1230	479	1.1	1.7	.10	36.	4.2	180.	--	--
83-06-07	1230	479	.9	1.6	.16	44.	4.2	190.	--	--
83-07-06	1115	479	2.8	3.2	.16	36.	7.2	191.	--	--
83-08-03	0900	479	1.8	3.7	.15	44.	6.2	225.	--	--
83-09-07	1230	479	1.1	3.0	.15	43.	1.3	188.	--	--
83-10-04	1300	479	.9	3.4	.23	41.	.5	178.	--	--
83-11-03	0900	479	.9	2.5	.16 08L	42.	2.0 02L	184.	--	--
83-12-15	0830	479	1.0	2.6	.74 08L	49.	3.6 02L	195.	--	--

STATION - 00AL05EC0005
NORTH SASKATCHEWAN RIVER AT PAKAN. ALBERTA LAT. 54D 0M 10S LONG. 112D 23M 53S

DATE	TIME/ YMD/AMJ	SUB-ID/ HEURE SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-11	1315	479	.120	.082	.038	--	.40	.38	L .01	Q .39
83-02-08	1300	479	.110	.091	.019	--	.49	.43	.06	.49
83-03-08	1230	479	.110	.089	.021	--	.48	.45	.09	.55
83-04-27	1230	479	.190	.023	.167	--	.41	.36	.29	.65
83-05-17	1230	479	.078	.039	.039	--	.38	.38	.11	.49
83-06-07	1230	479	.120	.052	.068	--	.37	.36	.13	.49
83-07-06	1115	479	.400	.094	.306	--	.80	.81	.44	1.25
83-08-03	0900	479	.110 06R	.070 03V	.040	--	.62 51V	.62 51R	.12 02R	.74
83-09-07	1230	479	.094	.082	.012	--	.57	.52	.05	.57
83-10-04	1300	479	.200	.180	.020	--	.53	.52	L .01	Q .53
83-11-03	0900	479	.170	.130	.040	--	.63	.62	.12	.74
83-12-15	0830	479	.880	--	--	--	1.50	1.90	.09	--

DATE	TIME/ YMD/AMJ	SUB-ID/ HEURE SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-11	1315	479	.18	.3	1.9	31	2.2	.08	L .0005	L .0005
83-02-08	1300	479	.23	.2	3.6	.48	4.1	.06	.0005	L .0005
83-03-08	1230	479	.26	L .1	1.4	.58	2.0	.03	L .0005	L .0005
83-04-27	1230	479	.17	.2	4.1	4.80	8.9	.05	L .0005	L .0005
83-05-17	1230	479	.17	.2	3.9	.80	4.7	.05	L .0005	L .0005
83-06-07	1230	479	.27	L .1	2.1	1.20	3.3	L .02	L .0005	L .0005
83-07-06	1115	479	.34	.3	11.0	4.80	15.8	.12	.0009	L .0005
83-08-03	0900	479	.37 10R	L .1 06W	5.8 04R	.58 02R	6.4	.08 05V	.0016 08V	.0002 08V
83-09-07	1230	479	.42	.1	2.0	.29	2.3	.10	.0008 08D	.0001 08D
83-10-04	1300	479	.35	.2	1.8	.30	2.1	.11	.0010 08D	.0002 08D
83-11-03	0900	479	.37	.4	1.9	.69	2.6	.07	.0006 08D	.0002 08D
83-12-15	0830	479	.26	3.8	2.8	.50	3.3	.07	.0020 08D	.0002 08D

DATE	TIME/ YMD/AMJ	SUB-ID/ HEURE SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-11	1315	479	--	L .004	--	L .01	--	L .04	L .02	L .001
83-02-08	1300	479	--	--	--	L .01	--	L .04	L .02	--
83-03-08	1230	479	--	--	--	L .01	--	L .04	L .02	--
83-04-27	1230	479	--	--	--	L .01	--	L .04	L .02	--
83-05-17	1230	479	--	L .004	--	L .01	--	L .04	L .02	L .001
83-06-07	1230	479	--	--	--	L .01	--	L .04	L .02	--
83-07-06	1115	479	--	--	--	L .01	--	.06	L .02	--
83-08-03	0900	479	--	L .004 01W	--	L .01 04T	--	L .04 04T	L .02 11W	.001 02W
83-09-07	1230	479	--	--	--	L .01	--	L .04	L .02	--
83-10-04	1300	479	--	L .005	--	L .01	--	L .04	L .02	L .001 02P
83-11-03	0900	479	--	--	--	L .02	--	L .04	L .02	--
83-12-15	0830	479	--	--	--	L .02	--	L .04	L .02	--

DATE	TIME/ YMD/AMJ	SUB-ID/ HEURE SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-11	1315	479	--	L .002	L .002	.002	.004	L .001	.07	L .004
83-05-17	1230	479	--	L .002	.002	.003	.005	L .001	.05	L .004
83-08-03	0900	479	--	L .002 02W	.003 02W	.001 05W	.003 05W	L .001 02W	.10 01W	L .004 02W
83-10-04	1300	479	--	L .001 02P	.004 02P	.002 05P	.003 05P	L .001 02P	L .10 01P	L .001 02P

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05EC0005
NORTH SASKATCHEWAN RIVER AT PAKAN, ALBERTA

LAT. 54D 0M 10S LONG. 112D 23M 53S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-11	1315	479	.002	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-02-08	1300	479	001	--	--	--	--	--	--	--
83-03-08	1230	479	.003	--	--	--	--	--	--	--
83-04-27	1230	479	.009	--	--	--	--	--	--	--
83-05-17	1230	479	002	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-06-07	1230	479	.006	--	--	--	--	--	--	--
83-07-06	1115	479	.004	--	--	--	--	--	--	--
83-08-03	0900	479	.003 35W	L.001 11R	.001 75R	L.001 70R	L.001 30R	L.002 10R	L.001 20R	L.001 05R
83-09-07	1230	479	.004	--	--	--	--	--	--	--
83-10-04	1300	479	.010	L.001	002	001	L.001	L.002	L.001	L.001
83-11-03	0900	479	.002	--	--	--	--	--	--	--
83-12-15	0830	479	.012	--	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-11	1315	479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-17	1230	479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-03	0900	479	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R
83-10-04	1300	479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-11	1315	479	L.001	L.003	L.002	L.2	100	L.009	L.004	L.002
83-05-17	1230	479	L.001	L.003	L.002	L.2	.050	L.009	L.004	L.002
83-08-03	0900	479	L.001 25R	L.003 60R	L.002 65R	L.2 20W	200 00W	L.009 50W	L.004 55W	L.002 10W
83-10-04	1300	479	L.001	L.003	L.002	L.2	.090	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-11	1315	479	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-05-17	1230	479	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-08-03	0900	479	L.004 40W	--	L.002 59R	L.002 60R	L.005 62R	L.002 64R	L.5 90W	L.2 95W
83-10-04	1300	479	L.004	--	--	--	--	L.002	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18205P IMIDAN UG/L	18215P DISULFOTON UG/L	18230P CRUFOMATE UG/L	18240P PARATHION UG/L	18245P PARATHION-METHYL UG/L	18250P MALATHION UG/L	18260P FENCHLORPHOS (RONNEL) UG/L	18270P DIAZINON UG/L
83-01-11	1315	479	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-05-17	1230	479	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-08-03	0900	479	L.2 05W	L.02 15W	L.2 30W	L.02 40W	L.02 45W	L.05 50W	L.02 60W	L.02 70W
83-10-04	1300	479	--	--	L.2	L.02	L.02	--	L.02	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18300P PHORATE UG/L	18310P ETHION UG/L	18320P CARBO-PHENOTHION UG/L	92111P URANIUM DISSOLVED U UG/L	88502P RADIUM RADIATION RA-228 BQ/L	01502P TRITIUM RADIATION H-3 BQ/L	51501P ANTIMONY RADIATION SB-125 BQ/L	55502P CESIUM RADIATION CS-137 BQ/L
83-01-11	1315	479	L.02	L.02	L.02	--	--	--	--	--
83-05-17	1230	479	L.02	L.02	L.02	--	--	--	--	--
83-08-03	0900	479	L.02 00W	L.02 10W	L.02 20W	--	--	--	--	--
83-10-04	1300	479	--	--	L.02	--	--	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00AL05EF0001
NORTH SASKATCHEWAN RIVER AT LEA PARK, ALBERTA LAT. 53D 39M 29S LONG. 113D 20M 20S

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-19 1150	462	.0	21.9	346	332	7.8	7.7	3.0	2.6
83-02-23 1120	462	0	17.9	388	376	7.7	7.7	2.5	3.2
83-03-16 1200	462	.0	19.2	333	325	--	7.7	3.2	3.5
83-04-20 1100	462	5.4	20.2	292	285	8.2	8.0	52.0	42.0
83-05-18 0800	462	10.0	22.9	336	331.	8.1	8.1	32.0	20.0
83-06-08 0842	462	17.0	21.9	355	346	8.1	8.2	43.0	30.0
83-07-13 0810	462	19.5	11.0	358	343	7.9	8.0	106.0	65.0
83-08-15 1905	462	21.0	23.0	404	351	8.7	8.4	16.0	10.0
83-09-14 0949	462	11.5	17.8	351	318	8.8	8.7	4.6	2.1
83-10-12 0845	462	4.0	17.3	358	347	8.6	8.6	4.0	1.5
83-11-09 1307	462	1.5	18.9	336	336.	8.2	8.1	5.0	1.7
83-12-14 1200	462	1.0	11.9 61R	447	365 41R	8.0	7.7 01R	2.6	2.8 73R

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	05717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-19 1150	462	10	4	2	002	1900	510	--	10.1
83-02-23 1120	462	10	4	3	001	2400	122	--	8.8
83-03-16 1200	462	10	4	1	006	3900	130	--	10.4
83-04-20 1100	462	20	107	95	008	200	20	--	11.2
83-05-18 0800	462	20	53.	49	010	80	8	--	9.1
83-06-08 0842	462	10	44	35	009	60	14	--	8.6
83-07-13 0810	462	30.	165.	148	040	120	80	--	7.1
83-08-15 1905	462	10	13	12	005	12	4	--	8.1
83-09-14 0949	462	20	5	4	020	4.	L2	--	11.2
83-10-12 0845	462	5	3	2	002	L2	L2	--	12.4
83-11-09 1307	462	L5	L1	L1	006	8	L2	--	13.1
83-12-14 1200	462	L5 21R	3 01R	2 01R	002 17T	70 02U	4 12U	--	10.9

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-19 1150	462	0	0	165	135.0	45.0	13.7	168.8	6.2
83-02-23 1120	462	0	0	177	145.0	49.8	14.5	184.0	10.0
83-03-16 1200	462	0	0	149	122.0	42.1	12.6	157.0	8.1
83-04-20 1100	462	0	0	134	110.0	36.7	11.0	136.9	8.3
83-06-18 0800	462	0	0	158	130.0	42.3	12.5	157.1	6.1
83-06-08 0842	462	0	0	158	130.0	44.7	13.9	168.8	6.0
83-07-13 0810	462	0	.0	158	130.0	42.9	12.3	157.8	9.3
83-08-15 1905	462	3.	2.4	147	125.0	39.3	15.8	163.2	11.0
83-09-14 0949	462	4.	3.6	138	120.0	39.6	13.7	155.3	9.4
83-10-12 0845	462	6.	5.4	145	130.0	45.0	13.4	167.5	7.6
83-11-09 1307	462	0.	.0	157	129.0 06L	42.9	12.4	158.2	7.8
83-12-14 1200	462	0.	0 51R	160	131.0 06R	50.3 03R	14.5 02R	185.3	10.4 03R

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06404P CYANIDE TOTAL CN MG/L
83-01-19 1150	462	1.0	2.9	12	39	4.8	194	L1	.001
83-02-23 1120	462	1.2	7.6	19	46	5.6	222.	L1	.002
83-03-16 1200	462	1.0	5.0	08	40.	4.0	186.	L1	.002
83-04-20 1100	462	2.5	3.3	.09	36.	4.6	168.	--	004
83-06-18 0800	462	1.1	2.4	.11	34	4.2	181.	--	.003
83-06-08 0842	462	1.0	2.0	40	42.	4.0	192.	--	.004
83-07-13 0810	462	2.3	2.3	.21	38.	7.0	192	--	.005
83-08-15 1905	462	1.7	4.8	.18	49.	.4	197.	--	.003
83-09-14 0949	462	1.3	5.0	.15	42.	2	183	--	.005
83-10-12 0845	462	9	5.4	.25	45.	.3	196	--	.009
83-11-09 1307	462	1.0	3.3	.20 08L	44	.8 02L	189	--	004
83-12-14 1200	462	1.3 03R	5.4 06R	--	60. 06R	--	--	--	.003 04W

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL05EF0001
NORTH SASKATCHEWAN RIVER AT LEA PARK. ALBERTA

LAT. 53D 39M 29S LONG. 110D 20M 20S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-19	1150	462	.086	.074	.012	.070	.82	.77	.04	.81
83-02-23	1120	462	.120	.096	.024	.087	.72	.70	.05	.76
83-03-16	1200	462	.087	.077	.010	.068	.66	.67	.05	.72
83-04-20	1100	462	.210	.052	.158	.036	.65	.67	.35	1.02
83-05-18	0800	462	.086	.031	.055	.003	.34	.37	.10	.47
83-06-08	0842	462	.150	.060	.090	.047	.48	.49	.14	.63
83-07-13	0810	462	.220	.074	.146	.060	.61	.62	.30	.92
83-08-15	1905	462	.060	.010	.050	L.003	.26	.24	.23	.47
83-09-14	0949	462	.060	.008	.052	L.003	.50	.51	.17	.68
83-10-12	0845	462	.130	.120	.010	.072	.65	.63	.07	.70
83-11-09	1307	462	.140	.120	.020	.110	.70	.68	.04	.72
83-12-14	1200	462	.780 06R	.740 03V	.040	690 56V	2.20 51V	2.10 51R	.03 02R	2.13

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) C MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-19	1150	462	.31	.5	2.1	.31	2.4	.08	L.0005	L.0005
83-02-23	1120	462	.49	.3	2.5	.34	2.8	.07	L.0005	L.0005
83-03-16	1200	462	.50	.3	1.8	.37	2.2	.07	L.0005	L.0005
83-04-20	1100	462	.32	.2	4.3	3.10	7.4	.06	L.0005	L.0005
83-05-18	0800	462	.23	L.1	3.7	.77	4.5	.07	L.0005	L.0005
83-06-08	0842	462	.36	L.1	2.3	1.10	3.4	L.02	L.0005	L.0005
83-07-13	0810	462	.35	L.1	7.2	3.00	10.2	.11	.0012	L.0005
83-08-15	1905	462	L.01	L.1	4.8	1.50	6.3	.05	.0017 08D	.0002 08D
83-09-14	0949	462	.33	L.1	2.3	.93	3.2	.09	.0018 08D	.0002 08D
83-10-12	0845	462	.44	L.1	2.0	.43	2.4	.10	.0032 08D	.0001 08D
83-11-09	1307	462	.50	.3	3.0	.28	3.3	.06	.0013 08D	.0002 08D
83-12-14	1200	462	.44 10R	3.8 06W	3.1 04R	21 02R	3.3	.11 05V	.0016 08V	.0002 08V

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-19	1150	462	.12	--	--	L.01	--	L.04	L.02	L.001
83-02-23	1120	462	.04	--	--	L.01	--	L.04	L.02	L.001
83-03-16	1200	462	.10	--	--	L.01	--	L.04	L.02	L.001
83-04-20	1100	462	.68	--	--	L.01	--	.05	L.02	.004
83-05-18	0800	462	.22	--	--	L.01	--	L.04	L.02	.001
83-06-08	0842	462	.16	--	--	.08	--	L.04	L.02	L.001
83-07-13	0810	462	.80	--	--	.12	--	.11	.02	.007
83-08-15	1905	462	.19	--	--	.07	--	.04	L.02	.001 02P
83-09-14	0949	462	.10	--	--	.09	--	L.04	L.02	L.001 02P
83-10-12	0845	462	.18	--	--	.08	--	L.04	L.02	L.001 02P
83-11-09	1307	462	L.10	--	--	.07	--	L.04	L.02	L.001 02P
83-12-14	1200	462	.10 02W	--	--	L.02 04T	--	L.04 04T	L.02 11W	.001 02W

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-19	1150	462	L.015	L.002	.003	L.001	.002	L.001	.06	L.004
83-02-23	1120	462	L.015	L.002	.002	L.001	.003	L.001	L.05	L.004
83-03-16	1200	462	L.015	L.002	L.002	.002	--	L.001	.05	.004
83-04-20	1100	462	L.015	L.002	.059	.005	.029	L.001	L.05	L.004
83-05-18	0800	462	L.015	L.002	L.002	.003	.005	L.001	.06	L.004
83-06-08	0842	462	L.015	L.002	L.002	.003	.006	L.001	L.05	L.004
83-07-13	0810	462	L.015	.006	.010	.007	.015	L.001	.08	.006
83-08-15	1905	462	--	L.001 02P	.003 02P	.002 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P
83-09-14	0949	462	--	L.001 02P	.004 02P	.001 05P	.002 05P	L.001 02P	.10 01P	L.001 02P
83-10-12	0845	462	.002 03P	L.001 02P	.007 02P	.002 05P	.004 05P	L.001 02P	.16 01P	.002 02P
83-11-09	1307	462	.009 03P	L.001 02P	001 02P	L.001 05P	.002 05P	L.001 02P	L.10 01P	.001 02P
83-12-14	1200	462	.002 03W	L.001 02W	.005 02W	L.001 05W	.002 05W	L.001 02W	L.10 01W	L.001 02W

STATION - 00AL05EF0001
NORTH SASKATCHEWAN RIVER AT LEA PARK, ALBERTA

LAT 53D 39M 29S LONG. 110D 20M 20S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-19	1150	462	.002	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-02-23	1120	462	.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-03-16	1200	462	.002	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-04-20	1100	462	.003	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-05-18	0800	462	.002	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-06-08	0842	462	.002	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-07-13	0810	462	.004	L.001	.002	.002	L.001	L.002	L.001	L.001
83-08-15	1905	462	.003	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-09-14	0949	462	L.001	L.001	L.001	.002	L.001	L.002	L.001	L.001
83-10-12	0845	462	.002	L.001	.008	.002	L.001	L.002	L.001	L.001
83-11-09	1307	462	.013	L.001	.009	.002	L.001	L.002	L.001	L.001
83-12-14	1200	462	--	L.001 11R	.005 75R	.002 70R	L.001 30R	L.002 10R	L.001 20R	L.001 05R

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-19	1150	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-02-23	1120	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-16	1200	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-20	1100	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-18	0800	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-08	0842	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-13	0810	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-15	1905	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-14	0949	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-12	0845	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-11-09	1307	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-12-14	1200	462	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-19	1150	462	L.001	L.003	L.002	L.2	.200	L.009	L.004	L.002
83-02-23	1120	462	L.001	L.003	L.002	L.2	.200	L.009	L.004	L.002
83-03-16	1200	462	L.001	L.003	L.002	--	--	--	--	--
83-04-20	1100	462	L.001	L.003	L.002	L.2	.100	L.009	L.004	L.002
83-05-18	0800	462	L.001	L.003	L.002	L.2	.100	L.009	L.004	L.002
83-06-08	0842	462	L.001	L.003	L.002	L.2	.070	L.009	L.004	L.002
83-07-13	0810	462	L.001	L.003	L.002	L.2	.100	L.009	L.004	L.002
83-08-15	1905	462	L.001	L.003	L.002	L.2	.100	L.009	L.004	L.002
83-09-14	0949	462	L.001	L.003	L.002	L.2	.006	L.009	L.004	.013
83-10-12	0845	462	L.001	L.003	L.002	L.2	.130	.010	L.004	.016
83-11-09	1307	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-12-14	1200	462	L.001 25R	L.003 60R	L.002 65R	L.2 20W	L.004 00W	L.009 50W	L.004 55W	L.002 10W

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-19	1150	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-02-23	1120	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-16	1200	462	--	L.2	L.002	L.002	L.005	L.002	--	--
83-04-20	1100	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-18	0800	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-08	0842	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-13	0810	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-15	1905	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-09-14	0949	462	L.004	L.2	--	--	--	L.002	--	--
83-10-12	0845	462	L.004	L.2	--	--	--	L.002	--	--
83-11-09	1307	462	L.004	L.2	--	--	--	L.002	--	--
83-12-14	1200	462	L.004 40W	L.2 01W	--	--	--	L.002 64R	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL08AD0001
BEAVER RIVER AT BEAVER CROSSING, ALBERTA
LAT. 54D 21M 15S LONG. 110D 12M 42S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-19	1400	462	.0	22.1	582.	550.	7.2	7.4	6.5	5.5
83-02-23	1400	462	1.0	17.8	549.	545.	7.1	7.2	2.5	4.0
83-03-16	1420	462	1.0	20.5	528.	523.	7.1	7.3	4.1	6.0
83-04-20	1345	462	10.0	20.6	338.	327.	8.3	8.1	9.4	8.5
83-05-18	1438	462	11.0	23.7	369.	362.	8.3	8.2	3.9	2.2
83-06-08	1248	462	17.0	20.7	404.	393.	8.2	8.3	4.5	2.3
83-07-13	1142	462	19.0	10.7	341.	331.	8.1	8.1	4.5	5.0
83-08-16	0930	462	16.0	23.1	393.	345.	8.1	8.1	9.2	3.5
83-09-14	1404	462	11.0	18.0	419.	391.	8.3	8.3	3.6	2.2
83-10-12	1200	462	2.0	12.8 61R	392.	367. 41R	8.1	8.2 01R	5.6	2.9 73R
83-11-09	0958	462	.5	18.3	408.	415.	8.1	8.0	6.8	4.0
83-12-14	0950	462	.0	12.0	538.	524.	7.4	7.3	2.6	5.3

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-19	1400	462	20.	8.	4.	.001	8.	L2.	--	.8
83-02-23	1400	462	30.	6.	1.	.002	4.	L2.	--	1.1
83-03-16	1420	462	30.	4	2.	.002	28.	4.	--	3.2
83-04-20	1345	462	40.	17.	13.	.010	4.	L2.	--	10.8
83-05-18	1438	462	20.	3.	1.	.005	L2.	L2.	--	9.5
83-06-08	1248	462	30.	5.	4.	.003	44.	36.	--	8.5
83-07-13	1142	462	30.	24.	18.	.009	52.	44.	--	7.7
83-08-16	0930	462	40.	8.	6.	.007	40.	18.	--	8.2
83-09-14	1404	462	30.	9.	7.	L.001	10.	8.	--	10.7
83-10-12	1200	462	40. 21R	3. 01R	2. 01R	.002 17T	6. 02U	2. 12U	--	12.9
83-11-09	0958	462	40.	1.	L1.	.002	34.	14.	--	12.8
83-12-14	0950	462	40.	3.	2.	L.001	12.	4.	--	1.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-19	1400	462	0.	.0	360.	295.0	64.4	24.1	260.0	29.0
83-02-23	1400	462	0.	.0	354.	290.0	62.0	23.2	250.3	30.0
83-03-16	1420	462	0.	.0	335.	275.0	58.0	23.5	241.6	31.0
83-04-20	1345	462	0.	.0	207.	170.0	37.1	14.9	154.0	17.0
83-05-18	1438	462	0.	.0	219.	180.0	41.1	15.3	165.6	14.0
83-06-08	1248	462	0.	.0	244.	200.0	43.5	17.0	178.6	18.0
83-07-13	1142	462	0.	.0	195.	160.0	36.6	14.8	152.3	13.0
83-08-16	0930	462	0.	.0	213.	175.0	40.0	16.4	167.4	15.0
83-09-14	1404	462	0.	.0	250.	205.0	44.8	17.8	185.1	20.0
83-10-12	1200	462	0.	.0 51R	232.	190.0 01R	43.1 03R	16.0 02R	173.5	16.0 03R
83-11-09	0958	462	0.	.0	257.	211.0 06L	47.9	17.8	192.9	18.9
83-12-14	0950	462	0.	.0	315.	258.0 06L	61.8	21.9	244.5	24.7

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-19	1400	462	2.8	5.7	.14	19.	15.0	337.	L1.	.002
83-02-23	1400	462	2.7	6.3	.17	17.	15.0	330.	L1.	.003
83-03-16	1420	462	3.2	7.5	.10	20.	14.0	322.	L1.	.004
83-04-20	1345	462	3.7	4.5	.08	11.	7.8	198.	--	.003
83-05-18	1438	462	2.3	3.1	.12	9.	2.6	195.	--	.003
83-06-08	1248	462	2.3	3.6	.22	11.	2.2	218.	--	.004
83-07-13	1142	462	1.9	2.2	.15	10.	5.4	180.	--	.003
83-08-16	0930	462	2.6	2.6	.15	9.	5.6	196.	--	.007
83-09-14	1404	462	2.4	4.2	.12	14.	1.0	227.	--	.004
83-10-12	1200	462	1.9 03R	3.5 06R	.13 05W	13. 06R	--	--	--	.005 04W
83-11-09	0958	462	2.5	4.1	.14 08L	16.	4.7 02L	239.	--	.008
83-12-14	0950	462	2.8	5.6	.16 08L	19.	10.3 02L	301.	--	.005

STATION - 00AL05AD0001
BEAVER RIVER AT BEAVER CROSSING. ALBERTA LAT. 54D 21M 15S LONG. 110D 12M 42S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-19 1400 462	.090	.015	.075	.008	.50	.51	.07	.58
83-02-23 1400 462	.078	.027	.051	.016	.75	.80	.06	.86
83-03-16 1420 462	.087	.033	.054	.018	1.10	1.00	.10	1.10
83-04-20 1345 462	.160	.052	.108	.028	.55	.58	.22	.80
83-05-18 1438 462	.056	.037	.019	.003	.39	.36	.04	.40
83-06-08 1248 462	.130	.070	.060	.047	.47	.47	.16	.63
83-07-13 1142 462	.110	.049	.061	.019	.51	.50	.17	.67
83-08-16 0930 462	.088	.051	.037	.029	.62	.59	.11	.70
83-09-14 1404 462	.047	.027	.020	.016	.50	.49	.04	.53
83-10-12 1200 462	.047 06R	.031 03V	.016	.015 56V	.56 51V	.55 51R	.05 02R	.60
83-11-09 0958 462	.077	.059	.018	.007	.58	.58	.06	.64
83-12-14 0950 462	.068	.044	.024	.022	.72	.73	.04	.77

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-19 1400 462	.07	.9	12.0	.50	12.5	.16	.0009	L.0005
83-02-23 1400 462	.20	.5	12.0	.32	12.3	.14	.0006	L.0005
83-03-16 1420 462	.33	.7	11.0	.57	11.6	.18	L.0005	L.0005
83-04-20 1345 462	.08	L.1	11.0	1.40	12.4	.11	L.0005	L.0005
83-05-18 1438 462	.05	L.1	9.5	.26	9.8	.08	.0006	L.0005
83-06-08 1248 462	.08	L.1	9.9	.29	10.2	.04	.0009	L.0005
83-07-13 1142 462	.01	.1	14.0	1.20	15.2	.11	.0013	L.0005
83-08-16 0930 462	L.01	L.1	17.0	.83	17.8	.15	.0016 08D	.0001 08D
83-09-14 1404 462	.02	L.1	12.0	.28	12.3	.08	.0025 08D	.0001 08D
83-10-12 1200 462	.03 10R	L.1 06W	13.0 04R	.31 02R	13.3	.13 05V	.0008 08V	L.0001 08V
83-11-09 0958 462	.10	L.1	14.0	.42	14.4	.13	.0014 08D	.0001 08D
83-12-14 0950 462	.23	.3	16.0	.42	16.4	.17	.0017 08D	L.0001 08D

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-19 1400 462	.07	--	--	1.50	--	.07	L.02	L.001
83-02-23 1400 462	L.02	--	--	1.00	--	.05	L.02	L.001
83-03-16 1420 462	.05	--	--	.46	--	.09	.03	L.001
83-04-20 1345 462	.11	--	--	.02	--	.28	L.02	L.001
83-05-18 1438 462	L.02	--	--	.01	--	.10	.03	L.001
83-06-08 1248 462	.06	--	--	.10	--	.07	L.02	L.001
83-07-13 1142 462	.15	--	--	.07	--	L.04	L.02	.001
83-08-16 0930 462	L.10	--	--	.07	--	.14	L.02	.002 02P
83-09-14 1404 462	.13	--	--	.12	--	.08	.02	.001 02P
83-10-12 1200 462	.15 02W	--	--	.09 04T	--	.11 04T	L.02 11W	L.001 02W
83-11-09 0958 462	L.10	--	--	.09	--	.14	L.02	L.001 02P
83-12-14 0950 462	L.10	--	--	.14	--	.22	L.02	L.001 02P

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-19 1400 462	L.015	L.002	L.002	L.001	L.001	L.001	.08	L.004
83-02-23 1400 462	L.015	L.002	L.002	.001	.003	L.001	.08	L.004
83-03-16 1420 462	--	L.002	L.002	.002	--	L.001	.07	.005
83-04-20 1345 462	L.015	L.002	.005	.002	--	L.001	L.05	L.004
83-05-18 1438 462	L.015	L.002	L.002	.003	.003	L.001	L.05	L.004
83-06-08 1248 462	L.015	L.002	L.002	.001	.005	L.001	L.05	L.004
83-07-13 1142 462	L.015	L.002	.002	.002	.002	L.001	.06	L.004
83-08-16 0930 462	--	L.001 02P	.001 02P	.002 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P
83-09-14 1404 462	--	L.001 02P	.001 02P	.001 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P
83-10-12 1200 462	L.001 03W	L.001 02W	.002 02W	.001 05W	L.001 05W	L.001 02W	.17 01W	L.001 02W
83-11-09 0958 462	L.001 03P	L.001 02P	L.001 02P	L.001 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P
83-12-14 0950 462	.001 03P	L.001 02P	.001 02P	.003 05P	.001 05P	L.001 02P	L.10 01P	L.001 02P

STATION - 00AL08AD0001 LAT. 54D 21M 15S LONG. 110D 12M 42S
BEAVER RIVER AT BEAVER CROSSING. ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-19	1400	462	.002	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-02-23	1400	462	.003	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-03-16	1420	462	.003	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-04-20	1345	462	.004	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-05-18	1438	462	.004	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-06-08	1248	462	.010	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-07-13	1142	462	.005	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-08-16	0930	462	.006	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-09-14	1404	462	.002	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-10-12	1200	462	--	L.001 11R	.004 75R	L.001 70R	L.001 30R	L.002 10R	L.001 20R	L.001 05R
83-11-09	0958	462	.013	L.001	.004	L.001	L.001	L.002	L.001	L.001
83-12-14	0950	462	--	L.001	.001	L.001	L.001	L.002	L.001	L.001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-19	1400	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-02-23	1400	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-16	1420	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-20	1345	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-18	1438	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-08	1248	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-13	1142	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-16	0930	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-14	1404	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-12	1200	462	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R
83-11-09	0958	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-12-14	0950	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-19	1400	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-02-23	1400	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-16	1420	462	L.001	L.003	L.002	L.2	.060	L.009	L.004	L.002
83-04-20	1345	462	L.001	L.003	L.002	L.2	.040	L.009	L.004	L.002
83-05-18	1438	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-06-08	1248	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-07-13	1142	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-16	0930	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-09-14	1404	462	L.001	L.002	L.002	L.2	L.004	L.009	.004	L.002
83-10-12	1200	462	L.001 25R	L.003 60R	L.002 65R	L.2 20W	L.004 00W	L.009 50W	L.004 55W	L.002 10W
83-11-09	0958	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-12-14	0950	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-19	1400	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-02-23	1400	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-16	1420	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-20	1345	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-18	1438	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-08	1248	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-13	1142	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-16	0930	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-09-14	1404	462	L.004	L.2	--	--	--	L.002	--	--
83-10-12	1200	462	L.004 40W	L.2 01W	--	--	--	L.002 64R	--	--
83-11-09	0958	462	L.004	L.2	--	--	--	L.002	--	--
83-12-14	0950	462	L.004	L.2	--	--	--	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00AL07AA0015
ATHABASCA RIVER AT HWY 93A. ATHABASCA FALLS. LAT. 52D 39M 51S LONG. 117D 52M 50S
JASPER NATIONAL PARK, ALBERTA

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG C	02061L TEMP. WATER DEG C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-10 1320 417	0	22.7	204	200	8.0	8.0	2.8	2.6
83-02-14 1230 417	1.0	17.5	200	198	8.1	7.9	3.9	3.0
83-03-07 1320 417	5	17.2	206	202	8.2	8.0	1.6	2.0
83-04-11 1230 417	2.0	23.2	215.	217	8.3	8.1	1.5	1.4
83-05-02 1240 417	7.0	14.8	204	197.	8.3	8.1	1.8	2.3
83-06-06 1205 417	8.5	15.9	149	155	8.3	8.2	21.0	26.0
83-07-04 1225 417	9.4	17.0	131	142	8.2	8.3	82.0	57.0
83-08-08 1410 417	10.0	23.4	146.	142	--	8.3	200.0	140.0
83-09-12 1155 417	6.0	19.3	158	160	8.3	8.2	8.1	8.5
83-10-03 1215 417	4.0	12.3	167	165	8.0	8.1	4.0	3.0
83-11-07 1400 417	3.0	15.1	187	183	7.8	8.1	4.0	2.3
83-12-13 1130 417	5	5.6	199.	200	8.3	7.2	2.5	2.8

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-10 1320 417	5	3	--	L.001	L1.	L1.	19.	12.3
83-02-14 1230 417	L5	4 01R	--	L.001 17T	L1. 02U	L1. 12U	24 03U	12.2
83-03-07 1320 417	L5	1	--	.002	L1.	L1.	7.	12.3
83-04-11 1230 417	10	2	--	L.001	L1.	L1.	4.	12.2
83-05-02 1240 417	5	3	--	L.001	L1.	L1.	24.	10.5
83-06-06 1205 417	L5	14	--	.001	1.	1.	36.	10.4
83-07-04 1225 417	5	54	--	L.001	8.	L2.	40.	10.3
83-08-08 1410 417	5	182.	--	L.001	50.	L10.	50.	10.9
83-09-12 1155 417	L5	3	--	.001	31.	1.	20.	10.9
83-10-03 1215 417	L5	4	--	L.001	5.	4.	15.	11.4
83-11-07 1400 417	5	L1.	--	L.001	L2.	L2.	16.	12.3
83-12-13 1130 417	L5	2	--	L.001	1.	L1.	8.	12.5

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-10 1320 417	0	0	102.	84.0	27.8	9.4	108.1	1.0
83-02-14 1230 417	0	0	104.	85.0	26.8	9.4	105.6	.8
83-03-07 1320 417	0	0	107.	88.0	27.4	9.7	108.4	.9
83-04-11 1230 417	0	0	113.	93.0	29.0	10.4	115.2	1.2
83-05-02 1240 417	0.	0	106.	87.0	27.0	9.2	105.3	1.2
83-06-06 1205 417	0	0	83.	68.0	20.3	6.7	78.3	.5
83-07-04 1225 417	0.	0	84.	69.0	20.1	4.9	70.4	.7
83-08-08 1410 417	--	0	--	--	20.2	5.0	71.0	.5
83-09-12 1155 417	0	0	84.	69.0	21.8	7.0	83.3	.6
83-10-03 1215 417	0	0	88.	72.0	21.2	8.6	80.1	.8
83-11-07 1400 417	0	0	101.	83.0 08L	25.1	8.0	95.6	.8
83-12-13 1130 417	0	0	101.	82.9 06L	27.7	8.8	105.4	.9

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17208L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104? SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-10 1320 417	.3	5	07	20.	4.0	113.	--	--
83-02-14 1230 417	.3	.5	L.05	20.	4.2	113.	--	--
83-03-07 1320 417	.3	.4	L.05	20.	4.0	116.	--	--
83-04-11 1230 417	.3	.5	15	22.	4.2	123.	--	--
83-05-02 1240 417	.3	4	L.05	18.	4.4	113.	--	--
83-06-06 1205 417	.2	3	08	12.	3.0	84.	--	--
83-07-04 1225 417	.3	.3	06	9.	2.4	79.	--	--
83-08-08 1410 417	.2	3	08	8.	1.7	--	--	--
83-09-12 1155 417	.3	.3	07	14.	2.9	88.	--	--
83-10-03 1215 417	.3	4	L.05	16.	3.3	92.	--	--
83-11-07 1400 417	.3	.2	08 08L	17.	3.3 02L	104.	--	--
83-12-13 1130 417	.3	.3	07 08L	22.	3.7 02L	114.	--	--

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL07AA0015
ATHABASCA RIVER AT HWY 93A, ATHABASCA FALLS, LAT. 52D 39M 51S LONG. 117D 52M 50S
JASPER NATIONAL PARK, ALBERTA

DATE	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-10	1320	417	L .003	L .003	Q .000	--	.09	.09	L .01	Q .10
83-02-14	1230	417	.003 06R	.003 03V	.000	--	.10 51V	.10 51R	L .01 02R	Q .11
83-03-07	1320	417	L .003	L .003	Q .000	--	.10	.10	L .01	Q .11
83-04-11	1230	417	.003	L .003	Q .000	--	.08	.09	L .01	Q .10
83-05-02	1240	417	.003	L .003	Q .000	--	.09	.10	L .01	Q .11
83-06-06	1205	417	.014	.003	.011	--	.08	.08	L .01	Q .09
83-07-04	1225	417	.032	L .003	Q .029	--	.05	.05	L .01	Q .06
83-08-08	1410	417	.063	.005	.058	--	.04	.06	L .01	Q .07
83-09-12	1155	417	.010	.006	.004	--	.06	.08	L .01	Q .09
83-10-03	1215	417	.005	.003	.002	--	.08	.10	--	--
83-11-07	1400	417	L .003	L .003	Q .000	--	.10	.10	L .01	Q .11
83-12-13	1130	417	L .003	L .003	Q .000	--	.12	.12	L .01	Q .13

DATE	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-10	1320	417	.09	L .1	3	.11	.4	02	L .0005	L .0005
83-02-14	1230	417	.10 10R	L .1 06W	.4 04R	.09 02R	.5	02 05V	L .0005 04V	L .0005 02V
83-03-07	1320	417	.10	L .1	.4	.08	.5	L .02	L .0005	L .0005
83-04-11	1230	417	.09	L .1	4	.06	.5	03	L .0005	L .0005
83-05-02	1240	417	.07	L .1	.9	.13	1.0	02	L .0005	L .0005
83-06-06	1205	417	.07	L .1	.8	.13	.7	L .02	L .0005	L .0005
83-07-04	1225	417	.05	L .1	4	.17	.6	L .02	L .0005	L .0005
83-08-08	1410	417	.05	L .1	4	.30	.7	L .02	.0009 08D	L .0001 08D
83-09-12	1155	417	.06	L .1	.2	.11	.3	03	.0006 08D	L .0001 08D
83-10-03	1215	417	.06	L .1	.5	--	--	02	.0016 08D	L .0001 08D
83-11-07	1400	417	.08	L .1	.8	.06	.9	03	.0005 08D	L .0001 08D
83-12-13	1130	417	.09	L .1	.5	.07	.6	03	.0013 08D	L .0001 08D

DATE	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-10	1320	417	--	--	--	L .01	--	L .04	L .02	--
83-02-14	1230	417	--	--	--	L .01 04T	--	L .04 04T	L .02 11W	--
83-03-07	1320	417	--	--	--	L .01	--	L .04	L .02	--
83-04-11	1230	417	--	--	--	L .01	--	L .04	L .02	--
83-05-02	1240	417	--	--	--	L .01	--	L .04	L .02	--
83-06-06	1205	417	--	--	--	L .01	--	L .04	L .02	--
83-07-04	1225	417	--	--	--	L .01	--	L .04	L .02	--
83-08-08	1410	417	--	--	--	L .01	--	L .04	L .02	--
83-09-12	1155	417	--	--	--	L .01	--	L .04	L .02	--
83-10-03	1215	417	--	--	--	L .01	--	L .04	L .02	--
83-11-07	1400	417	--	--	--	L .02	--	L .04	L .02	--
83-12-13	1130	417	--	--	--	L .02	--	L .04	L .02	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 07AL07AA0023
ATHABASCA RIVER AT HWY 16 BRIDGE BELOW CONFLUENCE WITH SNARING RIVER. LAT. 53D 2M 30S LONG. 118D 5M 13S JASPER NATIONAL PARK, ALBERTA

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-10 1510 417	.0	22.7	237.	225	8.1	8.1	.9	1.0
83-02-14 1520 417	2.5	15.2	230.	227.	8.0	8.1	1.7	2.0
83-03-07 1500 417	.0	16.8	236.	233.	8.2	8.2	1.1	1.5
83-04-11 1415 417	2.5	23.0	231.	231.	8.4	8.3	1.0	1.6
83-05-02 1430 417	8.0	15.5	222	213.	8.4	8.2	2.6	1.6
83-06-06 1330 417	9.0	15.9	144.	150.	8.3	8.2	9.7	14.0
83-07-04 1350 417	11.2	19.2	143.	146.	8.2	8.2	26.0	31.0
83-08-08 1830 417	12.0	23.3	149.	147.	--	8.3	190.0	140.0
83-09-12 1430 417	3.5	19.5	171.	173.	8.2	8.2	6.2	7.1
83-10-03 1415 417	5.0	12.4	181.	177	8.4	8.3	3.0	2.4
83-11-07 1800 417	3.0	16.1	190	181	7.8	8.2	3.0	1.9
83-12-13 1330 417	.0	7.2	226.	217.	8.3	7.5	9.8	5.5

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	05717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-10 1510 417	L5	1	--	.001	14.	2	L2	12.4
83-02-14 1520 417	5	3.	--	L.001	6.	L2	10.	12.3
83-03-07 1500 417	L5	L1.	--	.001	6.	L2	2	13.1
83-04-11 1415 417	5	2.	--	.001	L1.	L1	5.	13.4
83-05-02 1430 417	10	2.	--	L.001	1.	1.	14	10.7
83-06-06 1330 417	5	14	--	L.001	50.	2	28	10.8
83-07-04 1350 417	5	26.	--	L.001	64.	8.	30	10.1
83-08-08 1830 417	5	165	--	L.001	130.	40.	90	10.3
83-09-12 1430 417	L5	3. 01R	--	.001 17T	14. 02U	2 12U	10. 03U	10.6
83-10-03 1415 417	L5	3.	--	L.001	25.	6.	12.	11.9
83-11-07 1800 417	L5	L1.	--	.002	L2.	L2.	2.	12.8
83-12-13 1330 417	L5	23.	--	.002	14.	4	12.	12.4

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-10 1510 417	0	.0	115.	94.0	32.0	10.6	123.5	1.6
83-02-14 1520 417	0	.0	115.	94.0	30.8	10.5	120.1	1.6
83-03-07 1500 417	0	.0	118.	97.0	31.4	10.8	122.9	1.8
83-04-11 1415 417	0	.0	117	96.0	31.1	10.8	122.1	1.9
83-05-02 1430 417	0	0	111.	91.0	29.4	9.9	114.2	1.5
83-06-06 1330 417	0	.0	74.	61.0	19.2	6.1	73.1	.7
83-07-04 1350 417	0	.0	74.	61.0	19.5	5.3	70.5	.8
83-08-08 1830 417	--	.0	--	--	20.3	5.4	72.9	.6
83-09-12 1430 417	0	.0	84.	69.0	23.1	7.5	88.6	.8
83-10-03 1415 417	0	.0	89.	73.0	22.8	7.1	86.2	1.2
83-11-07 1800 417	0	.0	90.	74.0 05L	24.7	7.8	93.8	1.1
83-12-13 1330 417	0	.0	110.	89.9 05L	31.8	9.6	118.9	1.6

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-10 1510 417	.4	.9	.07	24.	4.1	130.	--	.003
83-02-14 1520 417	.4	1.0	L.05	26.	4.2	131.	--	L.001
83-03-07 1500 417	.4	1.0	.06	26.	4.0	134.	--	.001
83-04-11 1415 417	.5	1.1	.11	26.	3.8	133.	--	L.001
83-05-02 1430 417	.5	.8	L.05	20.	3.8	121.	--	.002
83-06-06 1330 417	.3	.9	.06	13.	3.6	80.	--	.002
83-07-04 1350 417	.3	.4	L.05	12.	2.6	78.	--	L.001
83-08-08 1830 417	.2	.3	L.05	10.	2.1	--	--	.001
83-09-12 1430 417	.3	.4	.09	18.	2.9	94.	--	.002 04W
83-10-03 1415 417	.4	.5	L.05	22.	3.1	101.	--	.002
83-11-07 1800 417	.3	.3	.07 08L	23.	3.4 02L	105.	--	L.001
83-12-13 1330 417	.4	.8	.08 08L	29.	3.8 02L	131.	--	.001

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL07AA0023 LAT. 53D 2M 30S LONG. 118D 5M 13S
ATHABASCA RIVER AT HWY 16 BRIDGE BELOW CONFLUENCE WITH SNARING RIVER. JASPER NATIONAL PARK, ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07803L NITROGEN TOTAL (CALCD.) N MG/L
83-01-10	1510	417	.006	.004	.002	--	.10	.10	--	--
83-02-14	1520	417	.009	.009	.000	--	.11	.12	L.01	Q.13
83-03-07	1500	417	.006	.006	.000	--	.10	.10	L.01	Q.11
83-04-11	1415	417	.006	.005	.001	--	.07	.07	L.01	Q.08
83-06-02	1430	417	.011	L.003	Q.008	--	.10	.10	L.01	Q.11
83-06-06	1330	417	.010	.005	.005	--	.07	.09	L.01	Q.10
83-07-04	1350	417	.021	.007	.014	--	.05	.05	L.01	Q.07
83-08-08	1630	417	.074	.007	.067	--	.04	.05	L.01	Q.07
83-09-12	1430	417	.006 06R	.003 03V	.003	--	.08 51V	.08 51R	L.01 02R	Q.09
83-10-03	1415	417	.005	L.003	Q.002	--	.07	.08	L.01	Q.09
83-11-07	1600	417	.011	.009	.002	--	.09	.14	L.01	Q.15
83-12-13	1330	417	.025	.004	.021	--	.13	.14	.03	.17

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-10	1510	417	.10	L.1	.9	--	--	.02	L.0005	L.0005
83-02-14	1520	417	.10	L.1	.6	.14	.7	.02	L.0005	L.0005
83-03-07	1500	417	10	L.1	.6	.11	.7	L.02	L.0005	L.0005
83-04-11	1415	417	.15	L.1	.5	.22	.7	.03	L.0005	L.0005
83-06-02	1430	417	.07	L.1	1.0	.24	1.2	.03	L.0005	L.0005
83-06-06	1330	417	.06	L.1	.8	.14	.9	L.02	L.0005	L.0005
83-07-04	1350	417	.04	L.1	.5	.14	.6	L.02	L.0005	L.0005
83-08-08	1630	417	.04	L.1	.4	.33	.7	L.02	.0005 08D	L.0001 08D
83-09-12	1430	417	.05 10R	L.1 06W	.6 04R	.23 02R	.8	.03 05V	.0009 08V	--
83-10-03	1415	417	.04	L.1	.4	.15	.6	.02	.0008 08D	L.0001 08D
83-11-07	1600	417	.08	L.1	.8	.13	.9	.03	.0006 08D	.0002 08D
83-12-13	1330	417	.10	L.1	.5	.81	1.1	.03	.0014 08D	L.0001 08D

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-10	1510	417	--	--	--	L.01	--	L.04	L.02	L.001
83-02-14	1520	417	--	--	--	L.01	--	L.04	L.02	L.001
83-03-07	1500	417	--	--	--	L.01	--	L.04	L.02	L.001
83-04-11	1415	417	--	--	--	L.01	--	L.04	L.02	L.001
83-06-02	1430	417	--	--	--	L.01	--	L.04	L.02	L.001
83-06-06	1330	417	--	--	--	L.01	--	L.04	L.02	L.001
83-07-04	1350	417	--	--	--	L.01	--	L.04	L.02	L.001
83-08-08	1630	417	--	--	--	L.01	--	L.04	L.02	.002 02P
83-09-12	1430	417	--	--	--	L.01 04T	--	L.04 04T	L.02 11W	L.001 02W
83-10-03	1415	417	--	--	--	L.01	--	L.04	L.02	L.001 02P
83-11-07	1600	417	--	--	--	L.02	--	L.04	L.02	L.001 02P
83-12-13	1330	417	--	--	--	L.02	--	L.04	L.02	L.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-10	1510	417	--	L.002	.005	L.001	L.001	L.001	L.05	L.004
83-02-14	1520	417	--	L.002	L.002	L.001	.001	L.001	L.05	L.004
83-03-07	1500	417	--	L.002	L.002	L.001	--	L.001	.05	L.004
83-04-11	1415	417	--	L.002	L.002	L.001	--	L.001	L.05	L.004
83-06-02	1430	417	--	L.002	L.002	L.001	.003	L.001	L.05	L.004
83-06-06	1330	417	--	L.002	L.002	.001	.004	L.001	L.05	L.004
83-07-04	1350	417	--	L.002	.002	L.001	.002	L.001	L.05	L.004
83-08-08	1630	417	--	L.002 02P	.002 02P	.002 05P	.005 05P	L.001 02P	.06 01P	L.004 02P
83-09-12	1430	417	--	L.001 02W	L.001 02W	L.001 05W	.002 05W	L.001 02W	L.10 01W	L.001 02W
83-10-03	1415	417	--	L.001 02P	L.001 02P	.001 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P
83-11-07	1600	417	--	L.001 02P	L.001 02P	L.001 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P
83-12-13	1330	417	--	L.001 02P	.002 02P	.002 05P	.005 05P	L.001 02P	L.10 01P	.003 02P

STATION - 07AL07AA0023
ATHABASCA RIVER AT HWY 16 BRIDGE — BELOW CONFLUENCE WITH SNARING RIVER, JASPER NATIONAL PARK, ALBERTA — LAT 53D 2M 30S LONG 118D 5M 13S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-10	1510	417	.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-02-14	1520	417	L.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-03-07	1500	417	.003	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-04-11	1415	417	L.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-05-02	1430	417	.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-06-06	1330	417	.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-07-04	1350	417	L.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-08-08	1630	417	L.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-09-12	1430	417	L.001 35W	L.001 11R	.001 75R	L.001 70R	L.001 30R	L.002 10R	L.001 20R	L.001 05R
83-10-03	1415	417	L.001	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-11-07	1600	417	.002	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-12-13	1330	417	--	L.001	L.001	L.001	L.001	L.002	L.001	L.001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-10	1510	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-02-14	1520	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-07	1500	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-11	1415	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-02	1430	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-06	1330	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-04	1350	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-08	1630	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-12	1430	417	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R
83-10-03	1415	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-11-07	1600	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-12-13	1330	417	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-10	1510	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-02-14	1520	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-07	1500	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-04-11	1415	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-02	1430	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-06-06	1330	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-07-04	1350	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-08	1630	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-09-12	1430	417	L.001 25R	L.003 60R	L.002 55R	L.2 20W	L.004 00W	L.005 50W	L.004 55W	L.002 10W
83-10-03	1415	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-11-07	1600	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-12-13	1330	417	L.001	L.003	L.002	L.2	L.004	L.009	L.004	.006

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-10	1510	417	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-02-14	1520	417	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-07	1500	417	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-11	1415	417	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-02	1430	417	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-06	1330	417	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-04	1350	417	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-08	1630	417	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-09-12	1430	417	L.004 40W	L.2 01W	--	--	--	L.002 84R	--	--
83-10-03	1415	417	L.004	L.2	--	--	--	L.002	--	--
83-11-07	1600	417	L.004	L.2	--	--	--	L.002	--	--
83-12-13	1330	417	L.004	L.2	--	--	--	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT — G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION — G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL07BE0001
ATHABASCA RIVER AT ATHABASCA, ALBERTA

LAT. 54D 43M 18S LONG. 113D 17M 8S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG C	02061L TEMP. WATER DEG C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-11	0915	479	.5	9.3	415.	383.	7.8	7.6	3.0	2.0
83-02-08	0930	479	.0	18.8	417.	396.	7.7	7.6	3.0	5.7
83-03-08	0845	479	.0	15.8	380.	376.	--	7.6	3.8	2.4
83-04-27	0900	479	4.0	20.3	245.	235.	7.8	8.0	134.0	100.0
83-05-17	0835	479	11.0	22.7	288.	294.	8.1	8.2	--	8.0
83-06-07	0845	479	14.0	20.1	215.	213.	7.8	8.2	100.0	72.0
83-07-06	0815	479	16.0	20.8	207.	205.	7.7	8.0	140.0	110.0
83-08-02	1730	479	20.0	21.9	199.	192.	--	8.0	70.0	51.0
83-09-07	0910	479	13.0	4.8	231.	230.	8.0	8.2	20.0	13.0
83-10-04	0910	479	7.0	17.5	282.	277.	8.0	8.2	6.0	4.0
83-11-02	1600	479	4.0	14.9	319.	324.	8.1	8.1	12.0	6.5
83-12-14	1415	479	0	8.6	388.	397.	7.9	7.7	1.8	3.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR MG/L	08717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-11	0915	479	20.	2	--	001	16.	8	16.	11.7
83-02-08	0930	479	20.	11	--	001	9.	4.	44.	10.1
83-03-08	0845	479	30.	2	--	003	38.	7.	L2.	9.4
83-04-27	0900	479	30.	190	--	010	20.	L2	56	11.8
83-05-17	0835	479	20.	18	--	001	--	6	44.	10.4
83-06-07	0845	479	10.	131	--	020	20.	L2.	80.	9.7
83-07-06	0815	479	60.	206	--	010	--	50.	190.	8.7
83-08-02	1730	479	70.	96	--	L 001	--	20	140.	7.5
83-09-07	0910	479	5.	10	--	003	--	6.	137.	8.7
83-10-04	0910	479	10.	5	--	007	--	2.	74.	11.1
83-11-02	1600	479	20.	15	--	003	L2	L2	2	13.0
83-12-14	1415	479	30.	1	--	L 001	16.	L2	32.	12.2

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-11	0915	479	0.	0	219.	180.0	54.9	14.4	196.4	12.0
83-02-08	0930	479	0.	0	213.	175.0	54.4	15.1	198.0	12.0
83-03-08	0845	479	0	0	195.	160.0	52.0	14.2	188.3	12.0
83-04-27	0900	479	0.	0	128.	105.0	31.4	8.0	111.3	8.4
83-06-17	0835	479	0.	0	152.	125.0	38.0	9.7	134.8	8.2
83-06-07	0845	479	0.	0	116.	95.0	28.3	7.5	101.5	3.2
83-07-06	0815	479	0.	0	115.	94.0	27.7	7.0	98.0	4.8
83-08-02	1730	479	0	0	104.	85.0	27.1	6.7	95.3	4.4
83-09-07	0910	479	0.	0	121.	99.0	33.3	8.8	119.4	4.5
83-10-04	0910	479	0.	0	140.	115.0	36.0	9.2	127.8	6.5
83-11-02	1600	479	0	0	167.	137.0 08L	43.4	11.1	154.1	7.7
83-12-14	1415	479	0.	0	205.	168.5 08L	52.0	13.3	184.6	13.5

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17208L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06504P CYANIDE TOTAL CN MG/L
83-01-11	0915	479	1.6	4.7	.12	35.	6.2	237.	--	--
83-02-08	0930	479	1.4	5.1	.09	38.	6.4	237.	--	--
83-03-08	0845	479	1.5	5.5	.13	38.	5.4	225	--	--
83-04-27	0900	479	1.7	2.6	L 05	18.	4.8	138.	--	--
83-06-17	0835	479	1.4	2.2	.07	22.	4.2	151.	--	--
83-06-07	0845	479	.6	1.1	.12	19.	3.2	120.	--	--
83-07-06	0815	479	1.0	1.1	.12	13.	6.4	117.	--	--
83-08-02	1730	479	1.0	1.2	.05	11.	7.7	116.	--	--
83-09-07	0910	479	1.0	1.9	.07	21.	2.7	133.	--	--
83-10-04	0910	479	1.2	2.5	.06	29.	2.8	156.	--	--
83-11-02	1600	479	1.1	2.0	.11 08L	33.	3.6 02L	184.	--	--
83-12-14	1415	479	2.0	5.3	.12 08L	42.	4.3 02L	234.	--	--

STATION - 00AL07BE0001
ATHABASCA RIVER AT ATHABASCA, ALBERTA

LAT. 54D 43M 18S LONG. 113D 17M 8S

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-11	0915		479	026	006	020	--	26	27	L 01	Q 28
83-02-08	0930		479	017	004	013	--	29	29	L 01	Q 30
83-03-08	0845		479	015	006	009	--	29	28	L 01	Q 29
83-04-27	0900		479	160	006	154	--	27	29	38	67
83-05-17	0835		479	027	005	022	--	18	18	07	25
83-06-07	0845		479	095	007	088	--	15	15	15	30
83-07-06	0815		479	190	008	182	--	36	27	28	55
83-08-02	1730		479	098	020	078	--	34	35	23	58
83-09-07	0910		479	020	003	017	--	15	15	06	21
83-10-04	0910		479	015	005	009	--	19	19	11	30
83-11-02	1600		479	015	005	010	--	14	14	05	19
83-12-14	1415		479	008	--	--	--	33	33	L 01	Q 34

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) C MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-11	0915		479	11	L 1	5 3	21	5 5	05	L 0005	L 0005
83-02-08	0930		479	16	L 1	5 5	06	5 6	05	L 0005	L 0005
83-03-08	0845		479	15	L 1	5 1	26	5 4	04	L 0005	L 0005
83-04-27	0900		479	04	L 1	5 3	4 60	10 9	06	L 0005	L 0005
83-06-17	0835		479	L 01	L 1	6 2	58	6 8	03	L 0005	L 0005
83-06-07	0845		479	06	L 1	2 2	2 00	4 2	L 02	L 0005	L 0005
83-07-06	0815		479	05	L 1	9 0	3 60	12 6	09	0005	L 0005
83-08-02	1730		479	01	L 1	12 0	2 20	14 2	16	0014 08D	L 0001 08D
83-09-07	0910		479	L 01	L 1	4 2	59	4 8	05	0011 08D	L 0001 08D
83-10-04	0910		479	L 01	L 1	4 8	72	5 5	07	0013 08D	0002 08D
83-11-02	1600		479	L 01	L 1	4 5	57	5 1	06	0009 08D	0002 08D
83-12-14	1415		479	06	L 1	9 6	21	9 8	10	0032 08D	0002 08D

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-11	0915		479	--	L 004	--	L 01	--	05	L 02	L 001
83-02-08	0930		479	--	--	--	L 01	--	L 04	L 02	--
83-03-08	0845		479	--	--	--	L 01	--	04	L 02	--
83-04-27	0900		479	--	--	--	L 01	--	07	L 02	--
83-06-17	0835		479	--	L 004	--	L 01	--	07	L 02	L 001
83-06-07	0845		479	--	--	--	L 01	--	04	L 02	--
83-07-06	0815		479	--	--	--	L 01	--	06	L 02	--
83-08-02	1730		479	--	L 004	--	L 01	--	11	L 02	004 02P
83-09-07	0910		479	--	--	--	L 01	--	09	L 02	--
83-10-04	0910		479	--	L 005	--	L 01	--	08	L 02	L 001 02P
83-11-02	1600		479	--	--	--	L 02	--	10	L 02	--
83-12-14	1415		479	--	--	--	L 02	--	L 04	L 02	--

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-11	0915		479	--	L 002	L 002	L 001	003	L 001	10	L 004
83-06-17	0835		479	--	L 002	L 002	002	011	L 001	08	L 004
83-08-02	1730		479	--	L 002 02P	005 02P	004 05P	012 05P	L 001 02P	11 01P	L 004 02P
83-10-04	0910		479	--	L 001 02P	L 001 02P	001 05P	002 05P	L 001 02P	L 10 01P	L 001 02P

STATION - 00AL07BE0001
ATHABASCA RIVER AT ATHABASCA, ALBERTA

LAT. 54D 43M 18S LONG 113D 17M 8S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-11 0915 479	.002	L.001	.008	L.001	L.001	L.002	L.001	L.001
83-02-08 0930 479	.003	--	--	--	--	--	--	--
83-03-08 0845 479	.002	--	--	--	--	--	--	--
83-04-27 0900 479	.002	--	--	--	--	--	--	--
83-05-17 0835 479	.003	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-06-07 0845 479	.001	--	--	--	--	--	--	--
83-07-06 0815 479	.003	--	--	--	--	--	--	--
83-08-02 1730 479	.004	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-10-04 0910 479	.001	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-11-02 1600 479	.002	--	--	--	--	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L MEOD (DIELDRIN) UG/L
83-01-11 0915 479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-17 0835 479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-02 1730 479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-04 0910 479	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-11 0915 479	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-17 0835 479	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-02 1730 479	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-10-04 0910 479	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1280 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-11 0915 479	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-05-17 0835 479	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-08-02 1730 479	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-10-04 0910 479	L.004	--	--	--	--	L.002	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18205P IMIDAN UG/L	18215P DISULFOTON UG/L	18230P CRUFOMATE UG/L	18240P PARATHION UG/L	18245P PARATHION-METHYL UG/L	18250P MALATHION UG/L	18260P FENCHLORPHOS (RONNEL) UG/L	18270P DIAZINON UG/L
83-01-11 0915 479	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-05-17 0835 479	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-08-02 1730 479	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-10-04 0910 479	--	--	L.2	L.02	L.02	--	L.02	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18300P PHORATE UG/L	18310P ETHION UG/L	18320P CARBO-PHENOTHION UG/L	92111P URANIUM DISSOLVED U UG/L	88502P RADIUM RADIATION RA-228 BQ/L	01502P TRITIUM RADIATION H-3 BQ/L	51501P ANTIMONY RADIATION SB-125 BQ/L	55502P CESIUM RADIATION CS-137 BQ/L
83-01-11 0915 479	L.02	L.02	L.02	--	--	--	--	--
83-05-17 0835 479	L.02	L.02	L.02	--	--	--	--	--
83-08-02 1730 479	L.02	L.02	L.02	--	--	--	--	--
83-10-04 0910 479	--	--	L.02	--	--	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00AL07FB0002
PEACE RIVER AT HWY 2, DUNVEGAN, ALBERTA LAT. 55D 55M 18S LONG. 118D 38M 32S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG C	02061L TEMP. WATER DEG C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-11	1130	1	.0	15.2	--	198.	8.1	7.9	--	5.9
83-02-15	1230	1	0	18.9	--	198.	--	7.9	--	2.5
83-03-15	1300	1	0	19.5	--	199.	8.1	8.1	--	1.8
83-04-26	1130	1	5.0	25.0	--	200.	7.7	7.9	--	250.0
83-05-16	1200	1	8.0	20.6	185.	196.	8.1	8.0	--	65.0
83-06-13	1230	1	16.0	21.1	--	209.	8.3	8.2	--	31.0
83-07-20	1230	1	14.0	21.6	185.	204.	8.0	8.1	--	140.0
83-08-15	1400	1	--	19.2	195.	217.	8.3	8.3	--	10.0
83-09-12	1400	1	13.0	20.6	--	190.	--	8.2	--	6.5
83-10-17	1500	1	7.5	14.7	195.	180.	8.5	8.2	--	3.8
83-11-14	1350	1	0	--	179.	--	--	--	--	--
83-12-13	1100	1	0	12.6	176.	156.	8.4	7.9	--	7.5

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-11	1130	1	5	4	--	--	12	4	L2.	14.2
83-02-15	1230	1	10	2	--	--	37	L2	L2	15.4
83-03-15	1300	1	10	L1	--	--	48	1	L2	14.0
83-04-26	1130	1	100	1028	--	--	1600	17	--	12.3
83-05-16	1200	1	30	169	--	--	63	1	4	11.4
83-06-13	1230	1	10	51	--	--	140	6	26.	12.1
83-07-20	1230	1	50	349	--	--	160	80	208.	10.3
83-08-15	1400	1	10	18	--	--	27	L2	4	9.6
83-09-12	1400	1	L5	7	--	--	40	2	13.	11.0
83-10-17	1500	1	5	5	--	--	107	L2.	44	--
83-11-14	1350	1	--	1	--	--	13.	L2.	L2.	13.6
83-12-13	1100	1	5	8	--	--	1	L1	L2.	16.1

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-11	1130	1	0	0	119.	98.0	32.9	7.0	111.0	1.8
83-02-15	1230	1	0	0	116.	95.0	30.1	6.7	102.7	1.7
83-03-15	1300	1	0	0	112.	92.0	30.0	6.7	102.5	2.2
83-04-26	1130	1	0	0	100.	82.0	28.9	6.6	99.3	3.1
83-05-16	1200	1	0	0	105.	86.0	28.2	6.5	97.2	1.8
83-06-13	1230	1	0	0	115.	94.0	30.6	7.1	105.6	1.7
83-07-20	1230	1	0	0	116.	95.0	30.7	7.1	105.9	1.7
83-08-15	1400	1	0	0	122.	100.0	32.0	7.6	111.2	2.3
83-09-12	1400	1	0	0	106.	87.0	29.0	6.6	99.6	1.5
83-10-17	1500	1	--	0	--	--	28.0	6.0	94.6	2.2
83-12-13	1100	1	0	0	103.	84.2 06L	29.7	5.8	98.0	1.4

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06504P CYANIDE TOTAL CN MG/L
83-01-11	1130	1	.5	.8	L.05	11.	4.5	117.	--	--
83-02-15	1230	1	.5	.8	L.05	11.	4.4	112.	--	--
83-03-15	1300	1	.5	.7	L.05	12.	4.0	111.	--	--
83-04-26	1130	1	1.4	.9	L.05	20.	4.0	114.	--	--
83-05-16	1200	1	.6	.8	.05	12.	4.0	105.	--	--
83-06-13	1230	1	.5	.7	.11	12.	3.4	112.	--	--
83-07-20	1230	1	.6	.8	.07	13.	4.6	116.	--	--
83-08-15	1400	1	.5	.9	.06	13.	4.2	121.	--	--
83-09-12	1400	1	.4	.7	L.05	10.	3.6	104.	--	--
83-10-17	1500	1	.4	.8	.05 08L	10.	3.3 02L	--	--	--
83-12-13	1100	1	.4	.5	L.05 08L	15.	3.6 02L	107.	--	--

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL07FB0002
PEACE RIVER AT HWY 2, DUNVEGAN, ALBERTA
LAT. 55D 55M 18S LONG. 118D 38M 32S

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-11 1130	1	.022	.003 03L	.019	--	--	.12	L.01	Q.13
83-02-15 1230	1	.007	.004 03L	.003	--	--	.14	L.01	Q.15
83-03-15 1300	1	.004	.003 03L	.001	--	--	.11	L.01	Q.12
83-04-28 1130	1	.640	.038 03L	.602	--	--	.44	1.50	1.94
83-05-16 1200	1	110	.010 03L	.100	--	--	.18	18	.36
83-06-13 1230	1	--	.055 03L	--	--	--	.10	.08	18
83-07-20 1230	1	.200	.038 03L	.162	--	--	.20	.36	56
83-08-15 1400	1	.020	.003 03L	.017	--	--	.09	L.01	Q.10
83-09-12 1400	1	020	L.003 03L	Q.017	--	--	.11	.03	.14
83-10-17 1500	1	010	.005 03L	005	--	--	08	.04	12
83-11-14 1350	1	017	.005 03L	.012	--	--	.10	.03	.13
83-12-13 1100	1	.011	.006 03L	005	--	--	.14	02	.16

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-11 1130	1	.07	L.1	2.4	.20	2.6	.04 05L	L.0005 04L	L.0005 02L
83-02-15 1230	1	.07	L.1	2.2	.10	2.3	.04 05L	L.0005 04L	L.0005 02L
83-03-15 1300	1	.05	L.1	2.4	.08	2.5	.03 05L	L.0005 04L	L.0005 02L
83-04-28 1130	1	.13	L.1	8.2	14.00	22.2	.08 05L	L.0005 04L	L.0005 02L
83-05-16 1200	1	06	L.1	5.5	1.80	7.3	.04 05L	L.0005 04L	L.0005 02L
83-06-13 1230	1	02	L.1	2.7	.88	3.6	.04 05L	L.0005 04L	L.0005 02L
83-07-20 1230	1	.05	L.1	5.4	3.80	9.2	08 05L	L.0005 08D	L.0005 08D
83-08-15 1400	1	.01	L.1	3.0	48	3.5	06 05L	.0009 08D	.0003 08D
83-09-12 1400	1	.03	L.1	2.4	.21	2.6	.05 05L	.0005 08D	.0002 08D
83-10-17 1500	1	L.01	L.1	2.3	.25	2.6	--	.0014 08D	.0003 08D
83-11-14 1350	1	.03	L.1	2.4	18	2.6	--	--	--
83-12-13 1100	1	04	L.1	2.6	19	2.8	.08 05L	--	--

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-11 1130	1	--	L.004	L.01	--	.09	--	--	L.001
83-05-16 1200	1	--	L.004	05	--	1.40	--	--	.006
83-08-15 1400	1	--	L.005	--	--	--	--	--	--
83-09-12 1400	1	--	--	--	--	--	--	--	.001 02P
83-10-17 1500	1	--	L.005	L.01	--	.15	--	--	.001 02P

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-11 1130	1	--	L.002	L.002	L.001	.002	L.001	L.05	L.004
83-05-16 1200	1	--	L.002	.011	.007	.020	L.001	.11	L.004
83-09-12 1400	1	--	L.001 02P	.001 02P	.001 05P	.003 05P	L.001 02P	L.10 01P	L.001 02P
83-10-17 1500	1	--	L.001 02P	.001 02P	.002 05P	L.001 05P	L.001 02P	.12 01P	.064 02P

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L P,P-DDT UG/L
83-01-11 1130	1	.001	--	--	--	--	--	--	--
83-03-15 1300	1	.002	--	--	--	--	--	--	--
83-04-28 1130	1	004	--	--	--	--	--	--	--
83-05-16 1200	1	.007	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-06-13 1230	1	002	--	--	--	--	--	--	--
83-07-20 1230	1	.004	--	--	--	--	--	--	--
83-08-15 1400	1	.002	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-09-12 1400	1	.002	--	--	--	--	--	--	--
83-10-17 1500	1	.001	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-11-14 1350	1	.001	--	--	--	--	--	--	--

STATION - 00AL07FD0002 LAT. 55D 55M 18S LONG. 118D 38M 32S
PEACE RIVER AT HWY 2, DUNVEGAN, ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-05-16	1200	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-15	1400	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-17	1500	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-11	1130	1	--	--	--	L.2	L.004	L.009	L.004	L.002
83-05-16	1200	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-15	1400	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-10-17	1500	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-11	1130	1	L.004	--	--	--	--	--	L.5	L.2
83-05-16	1200	1	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-08-15	1400	1	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-10-17	1500	1	L.004	--	--	--	--	L.002	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18205P IMIDAN UG/L	18215P DISULFOTON UG/L	18230P CRUFOMATE UG/L	18240P PARATHION UG/L	18245P PARATHION-METHYL UG/L	18250P MALATHION UG/L	18260P FENCHLORPHOS (RONNEL) UG/L	18270P DIAZINON UG/L
83-01-11	1130	1	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-05-16	1200	1	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-08-15	1400	1	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-10-17	1500	1	--	--	L.2	L.02	L.02	--	L.02	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18300P PHORATE UG/L	18310P ETHION UG/L	18320P CARBO-PHENOTHION UG/L	92111P URANIUM DISSOLVED U UG/L	88502P RADIUM RADIATION RA-226 BQ/L	01502P TRITIUM RADIATION H-3 BQ/L	51501P ANTIMONY RADIATION SB-125 BQ/L	55502P CESIUM RADIATION CS-137 BQ/L
83-01-11	1130	1	L.02	L.02	L.02	--	--	--	--	--
83-05-16	1200	1	L.02	L.02	L.02	--	--	--	--	--
83-08-15	1400	1	L.02	L.02	L.02	--	--	--	--	--
83-10-17	1500	1	--	--	L.02	--	--	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL07GJ0001
SMOKY RIVER AT WATINO, ALBERTA

LAT. 55D 42M 58S LONG. 117D 37M 18S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-10 1145	1	.0	15.5	--	475.	7.3	7.7	--	3.5
83-02-15 1000	1	.0	22.5	--	526.	--	7.7	--	13.0
83-03-15 1030	1	.0	20.5	--	534.	7.9	7.7	--	3.9
83-04-25 1330	1	7.0	19.8	--	260	8.0	8.0	--	260.0
83-05-17 1130	1	11.0	23.2	--	287.	7.8	8.2	--	8.7
83-06-13 1020	1	12.0	20.2	--	238.	8.1	8.3	--	54.0
83-07-19 1300	1	16.0	20.1	185.	202.	8.4	8.0	--	225.0
83-08-15 1030	1	17.0	21.2	260.	282.	8.2	8.3	--	70.0
83-09-12 1100	1	10.5	21.2	260.	290.	8.4	8.3	--	20.0
83-10-17 1100	1	5.0	14.6	340.	350.	8.3	8.3	--	6.7
83-11-14 1100	1	3.5	--	300.	--	--	--	--	--
83-12-12 1300	1	.0	8.8	--	531.	8.5	8.0	--	6.5

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-10 1145	1	30.	2.	--	--	40.	L2.	L2.	12.6
83-02-15 1000	1	60.	20.	--	--	10.	6.	L2.	11.9
83-03-15 1030	1	100.	5.	--	--	10.	L2.	L2.	12.0
83-04-25 1330	1	60.	728.	--	--	350.	110.	--	11.9
83-05-17 1130	1	20.	140.	--	--	140.	4.	L2.	9.9
83-06-13 1020	1	20.	92.	--	--	28.	L2.	356.	10.7
83-07-19 1300	1	160.	1071.	--	--	G2800.	G148.	630.	10.0
83-08-15 1030	1	40.	97.	--	--	G46.	6.	30.	8.7
83-09-12 1100	1	30.	22.	--	--	100.	5.	29.	10.5
83-10-17 1100	1	30.	5.	--	--	90.	L2.	60.	--
83-11-14 1100	1	--	14.	--	--	89.	L2.	L2.	14.7
83-12-12 1300	1	80.	8.	--	--	35.	4.	2.	16.0

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-10 1145	1	0.	.0	244.	200.0	69.0	17.4	243.9	15.0
83-02-15 1000	1	0.	.0	244.	200.0	71.1	17.0	247.5	23.0
83-03-15 1030	1	0.	.0	234.	192.0	70.2	17.5	247.3	25.0
83-04-25 1330	1	0.	.0	140.	115.0	35.0	8.9	124.0	9.6
83-05-17 1130	1	0.	.0	158.	130.0	38.0	9.5	134.0	7.3
83-06-13 1020	1	0.	.0	122.	100.0	32.0	8.2	113.7	4.8
83-07-19 1300	1	0.	.0	117.	96.0	28.4	6.6	98.1	4.7
83-08-15 1030	1	0.	.0	150.	123.0	39.2	9.6	137.4	6.4
83-09-12 1100	1	0.	.0	146.	120.0	40.0	10.1	141.5	6.8
83-10-17 1100	1	0.	.0	177.	145.0 06L	48.2	11.7	168.5	10.0
83-12-12 1300	1	0.	.0	254.	208.0 06L	68.8	16.2	238.5	20.5

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-10 1145	1	1.1	5.5	.12	61.	5.4	294.	--	--
83-02-15 1000	1	1.1	19.0	.09	72.	5.6	329.	--	--
83-03-15 1030	1	1.2	22.0	.07	68.	5.2	324.	--	--
83-04-25 1330	1	2.2	2.7	L.05	22.	4.0	153.	--	--
83-05-17 1130	1	1.2	2.9	.07	22.	4.0	163.	--	--
83-06-13 1020	1	.7	2.0	.20	19.	2.6	129.	--	--
83-07-19 1300	1	1.1	1.2	.12	15.	5.6	120.	--	--
83-08-15 1030	1	.9	2.0	.09	22.	4.3	158.	--	--
83-09-12 1100	1	.8	3.5	.09	25.	3.3	162.	--	--
83-10-17 1100	1	.9	4.7	.06 08L	38.	3.5 02L	204.	--	--
83-12-12 1300	1	1.3	15.7	.12 08L	48.	5.8 02L	301.	--	--

STATION - 00AL07GJ0001 LAT. 55D 42M 58S LONG 117D 37M 18S
SMOKY RIVER AT WATINO, ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-10	1145	1	.140	.006 03L	134	--	--	.18	L .01	Q .17
83-02-15	1000	1	.029	.008 03L	021	--	--	.19	.10	.29
83-03-15	1030	1	.023	.019 03L	004	--	--	.20	L .01	Q .21
83-04-25	1330	1	.360	.032 03L	328	--	--	.45	1.10	1.55
83-05-17	1130	1	.130	.022 03L	108	--	--	.24	.29	.53
83-06-13	1020	1	.084	.035 03L	049	--	--	.10	.13	.23
83-07-19	1300	1	.750	.031 03L	719	--	--	.36	1.20	1.56
83-08-15	1030	1	.074	.010 03L	064	--	--	.19	.15	.34
83-09-12	1100	1	.030	.009 03L	021	--	--	.17	.07	.24
83-10-17	1100	1	.020	.009 03L	011	--	--	.15	.05	.20
83-11-14	1100	1	.022	.011 03L	011	--	--	.16	.07	.23
83-12-12	1300	1	.019	.018 03L	.001	--	--	.34	.03	.37

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07503P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) C MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-10	1145	1	.07	L .1	3.9	.21	4.1	.07 05L	L .0005 04L	L .0005 02L
83-02-15	1000	1	.09	L .1	4.9	.90	5.8	.11 05L	L .0005 04L	L .0005 02L
83-03-15	1030	1	.10	L .1	6.1	45	6.6	.17 05L	L .0005 04L	L .0005 02L
83-04-25	1330	1	.08	.1	8.5	11.00	19.5	.08 05L	L .0005 04L	L .0005 02L
83-05-17	1130	1	.03	L .1	7.7	2.40	10.1	.05 05L	L .0005 04L	L .0005 02L
83-06-13	1020	1	.02	L .1	3.0	1.60	4.6	.05 05L	L .0005 04L	L .0005 02L
83-07-19	1300	1	.03	L .1	15.0	15.00	30.0	.20 05L	.0005 08D	L .0005 08D
83-08-15	1030	1	.01	L .1	6.8	1.80	8.6	.09 05L	.0014 08D	.0002 08D
83-09-12	1100	1	L .01	L .1	4.9	55	5.6	.07 05L	.0011 08D	.0002 08D
83-10-17	1100	1	L .01	L .1	4.9	42	5.3	--	.0009 08D	.0004 08D
83-11-14	1100	1	.02	L .1	6.0	.57	6.6	--	--	--
83-12-12	1300	1	.06	.1	9.5	.39	9.8	.25 05L	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-10	1145	1	--	L .004	.01	--	.13	--	--	L .001
83-05-17	1130	1	--	L .004	.02	--	.29	--	--	.007
83-08-15	1030	1	--	L .005	--	--	--	--	--	--
83-09-12	1100	1	--	--	--	--	--	--	--	.003 02P
83-10-17	1100	1	--	L .005	.02	--	.33	--	--	.002 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-10	1145	1	--	L .002	L .002	.001	L .001	L .001	.14	L .004
83-05-17	1130	1	--	L .002	009	.007	.019	L .001	.10	L .004
83-09-12	1100	1	--	L .001 02P	003 02P	.002 05P	005 05P	L .001 02P	L .10 01P	L .001 02P
83-10-17	1100	1	--	L .001 02P	001 02P	002 05P	.001 05P	L .001 02P	.16 01P	.002 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-10	1145	1	.002	L .001	.003	L .001	L .001	L .002	L .001	L .001
83-03-15	1030	1	.005	--	--	--	--	--	--	--
83-04-25	1330	1	.003	--	--	--	--	--	--	--
83-05-17	1130	1	.004	L .001	L .001	L .001	L .001	L .002	L .001	L .001
83-06-13	1020	1	.002	--	--	--	--	--	--	--
83-07-19	1300	1	.005	--	--	--	--	--	--	--
83-08-15	1030	1	.004	L .001	.002	L .001	L .001	L .002	L .001	L .001
83-09-12	1100	1	.003	--	--	--	--	--	--	--
83-10-17	1100	1	.003	L .001	.001	L .001	L .001	L .002	L .001	L .001
83-11-14	1100	1	.003	--	--	--	--	--	--	--
83-12-12	1300	1	.003	--	--	--	--	--	--	--

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL07GJ0001
SMOKY RIVER AT WATINO, ALBERTA

LAT. 55D 42M 56S LONG. 117D 37M 18S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-10	1145	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-17	1130	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-15	1030	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-17	1100	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-10	1145	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-17	1130	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-15	1030	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-10-17	1100	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	.004

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-10	1145	1	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-05-17	1130	1	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-08-15	1030	1	L.004	--	L.002	L.002	L.005	L.002	L.5	L.2
83-10-17	1100	1	L.004	--	--	--	--	L.002	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18205P IMIDAN UG/L	18215P DISULFOTON UG/L	18230P CRUFOMATE UG/L	18240P PARATHION UG/L	18245P PARATHION-METHYL UG/L	18250P MALATHION UG/L	18260P FENCHLORPHOS (RONNEL) UG/L	18270P DIAZINON UG/L
83-01-10	1145	1	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-05-17	1130	1	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-08-15	1030	1	L.2	L.02	L.2	L.02	L.02	L.05	L.02	L.02
83-10-17	1100	1	--	--	L.2	L.02	L.02	--	L.02	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18300P PHORATE UG/L	18310P ETHION UG/L	18320P CARBO-PHENOTHION UG/L	92111P URANIUM DISSOLVED U UG/L	88502P RADIUM RADIATION RA-226 BQ/L	01502P TRITIUM RADIATION H-3 BQ/L	51561P ANTIMONY RADIATION SB-125 BQ/L	55502P CESIUM RADIATION CS-137 BQ/L
83-01-10	1145	1	L.02	L.02	L.02	--	--	--	--	--
83-05-17	1130	1	L.02	L.02	L.02	--	--	--	--	--
83-08-15	1030	1	L.02	L.02	L.02	--	--	--	--	--
83-10-17	1100	1	--	--	L.02	--	--	--	--	--

FOOTNOTE L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00AL07NB0001
SLAVE RIVER AT FITZGERALD, ALBERTA

LAT 59D 52M 9S LONG 111D 35M 8S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		02061F TEMP WATER DEG C	02061L TEMP WATER DEG C	02041F SPECIFIC CONDUCT USIE/CM	02041L SPECIFIC CONDUCT USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-03-01 1300	1	0	17.6	--	223	--	7.6	--	4.0
83-04-14 1300	1	0	23.3	200	219	7.5	7.6	--	2.8
83-04-25 1500	1	0	17.8	--	231	7.2	7.7	--	16.0
83-06-15 0930	1	15.0	22.4	--	244	8.0	8.1	--	78.0
83-11-02 1100	1	2.0	18.3	185	189	8.0	7.9	--	32.0

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR MG/L	10501L RESIDUE FIXED NONFILTR MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP MF NO/DL	08101M OXYGEN DISSOLVED DO O2 MG/L
83-03-01 1300	1	10	7	--	--	--	--	--	--
83-04-14 1300	1	10	3	--	--	--	--	--	--
83-04-25 1500	1	10	16	--	--	--	--	--	--
83-06-15 0930	1	30	121	--	--	--	--	--	--
83-11-02 1100	1	10	113	--	--	--	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-03-01 1300	1	0	0	105	86.0	29.0	7.0	101.2	7.4
83-04-14 1300	1	0	0	101	83.0	27.8	6.8	97.4	8.5
83-04-25 1500	1	0	0	105	86.0	29.5	7.2	103.3	10.0
83-06-15 0930	1	0	0	108	89.0	30.0	7.3	105.0	7.9
83-11-02 1100	1	0	0	87	71.0 06L	25.3	5.7	86.6	5.9

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-03-01 1300	1	1.0	8.6	.06	16	5.0	126	--	--
83-04-14 1300	1	1.2	9.2	L.05	18	4.8	128	--	--
83-04-25 1500	1	1.0	11.0	L.05	19	4.6	134	--	--
83-06-15 0930	1	1.0	7.0	.09	22	3.5	132	--	--
83-11-02 1100	1	.9	5.6	--	21	3.2 02L	110	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-03-01 1300	1	023	003 03L	020	--	--	25	06	31
83-04-14 1300	1	012	003 03L	009	--	--	47	08	55
83-04-25 1500	1	026	L 003 03L	Q 023	--	--	82	19	1.01
83-06-15 0930	1	120	017 03L	103	--	--	16	22	38
83-11-02 1100	1	110	007 03L	103	--	--	14	12	26

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-03-01 1300	1	.10	--	3.2	.45	3.7	.05 05L	L.0005 04L	L.0005 02L
83-04-14 1300	1	.25	--	3.9	.61	4.5	.06 05L	L.0005 04L	L.0005 02L
83-04-25 1500	1	.09	--	5.6	1.10	6.7	.06 05L	L.0005 04L	L.0005 02L
83-06-15 0930	1	.03	--	4.9	2.20	7.1	.07 05L	L.0005 04L	L.0005 02L
83-11-02 1100	1	L.01	--	4.4	1.30	5.7	--	.0017 08D	.0002 08D

STATION - 00AL07NB0001 LAT. 59D 52M 9S LONG. 111D 35M 8S
SLAVE RIVER AT FITZGERALD, ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-03-01	1300	1	--	--	L .01	--	.19	--	--	L .001
83-04-14	1300	1	--	--	.01	--	.17	--	--	L .001
83-04-25	1500	1	--	--	.02	--	.24	--	--	L .001
83-06-15	0830	1	--	--	.07	--	1.70	--	--	.007
83-11-02	1100	1	--	--	.03	--	.95	--	--	.005 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-03-01	1300	1	--	L .002	L .002	.021	.020	L .001	L .05	L .004
83-04-14	1300	1	--	L .002	.003	.012	--	.004	.05	L .004
83-04-25	1500	1	--	L .002	L .002	.020	.012	L .001	L .05	L .004
83-06-15	0830	1	--	L .002	.005	.015	.023	L .001	L .05	L .004
83-11-02	1100	1	--	L .001 02P	.002 02P	.007 05P	.008 05P	L .001 02P	.19 01P	.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-03-01	1300	1	.003	L .001	.002	L .001	L .001	L .002	L .001	L .001
83-04-14	1300	1	.003	L .001	.003	L .001	L .001	L .002	L .001	L .001
83-04-25	1500	1	.005	L .001	.003	L .001	L .001	L .002	L .001	L .001
83-06-15	0830	1	.003	L .001	L .001	L .001	L .001	L .002	L .001	L .001
83-11-02	1100	1	.002	L .001	.005	.001	L .001	L .002	L .001	L .001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L MEOD (DIELDRIN) UG/L
83-03-01	1300	1	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-04-14	1300	1	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-04-25	1500	1	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-06-15	0830	1	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-11-02	1100	1	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-03-01	1300	1	L .001	L .003	L .002	L .2	L .004	L .009	L .004	L .002
83-04-14	1300	1	L .001	L .003	L .002	L .2	L .004	L .009	L .004	L .002
83-04-25	1500	1	L .001	L .003	L .002	L .2	L .004	L .009	L .004	L .002
83-06-15	0830	1	L .001	L .003	L .002	L .2	L .004	L .009	L .004	L .002
83-11-02	1100	1	L .001	L .003	L .002	L .2	L .004	L .009	L .004	L .002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-03-01	1300	1	L .004	L .2	L .002	L .002	L .005	L .002	--	--
83-04-14	1300	1	L .004	L .2	L .002	L .002	L .005	L .002	--	--
83-04-25	1500	1	L .004	L .2	L .002	L .002	L .005	L .002	--	--
83-06-15	0830	1	L .004	L .2	L .002	L .002	L .005	L .002	--	--
83-11-02	1100	1	L .004	L .2	--	--	--	L .002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 0CAL07HB0003
BENCH MARK CREEK NEAR FORT SMITH, ALBERTA LAT. 59D 48M 50S LONG. 111D 57M 43S

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-05-17 1400	1	8.5	23.2	--	22100	8.0	8.0	--	2.1
83-10-28 0940	1	.0	13.5	--	27500	7.8	7.6	--	1.4

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-05-17 1400	1	120	5	--	--	--	--	--	--
83-10-28 0940	1	10.	3	--	--	--	--	--	--

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-05-17 1400	1	0.	.0	140.	115.0	421.0	31.0	1179.0	4600.0
83-10-28 0940	1	0	0	190.	156.0 06L	674.0	43.7	1863.0	5440.0

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-05-17 1400	1	4.9	7000.0	.32	1020	2.6	13148.	--	--
83-10-28 0940	1	6.6	8410.0	.54 08L	1625	3.4 02L	16296	--	--

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-05-17 1400	1	.073	.019 03L	.054	--	--	.48	.05	.53
83-10-28 0940	1	.013	.007 03L	.006	--	--	--	.04	--

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-05-17 1400	1	L.01	--	15.0	.33	15.3	.32 05L	L.0005 04L	L.0005 02L
83-10-28 0940	1	.02	--	4.8	.26	5.1	--	.0005 08D	.0002 08D

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-05-17 1400	1	--	--	.06	--	.50	--	--	L.001
83-10-28 0940	1	--	--	.03	--	.13	--	--	L.001 02P

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-05-17 1400	1	--	L.002	.002	.002	.003	L.001	--	L.004
83-10-28 0940	1	--	L.001 02P	.001 02P	.005 05P	L.001 05P	L.001 02P	.23 01P	.002 02P

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL11AA0001 LAT. 49D 1M 18S LONG. 112D 58M 18S
NORTH MILK RIVER NEAR THE INTERNATIONAL BOUNDARY, ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-19	0830	3	0	19.5	448.	425	8.2	8.0	3.0	1.5
83-02-16	0830	3	1.0	18.6	409.	423.	8.1	7.9	3.0	2.2
83-03-16	0800	3	2.0	19.8	181.	175.	8.4	8.1	80.0	48.0
83-04-13	0815	3	3.0	18.4	165.	156.	7.7	8.1	12.0	6.0
83-05-26	0800	3	13.0	20.5	158.	162	7.8	8.1	22.0	16.0
83-06-15	1230	3	15.5	21.9	149.	145.	7.9	8.3	--	7.6
83-07-13	0800	3	15.0	22.3	139.	136.	7.7	8.2	20.0	13.0
83-08-17	0815	3	16.0	20.5	129.	127.	7.7	8.1	9.0	5.2
83-09-27	1130	3	9.0	17.9	394.	399.	8.7	8.4	2.6	4.3
83-10-19	1230	3	6.0	18.8	418.	421.	8.5	8.3	2.0	1.4
83-11-08	1140	3	1.0	12.7	418.	419	8.5	8.3	.8	2.0
83-12-06	1315	3	.0	7.1	510.	523.	7.8	7.8	2.4	1.8

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	05717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED BD O2 MG/L
83-01-19	0830	3	5.	2.	--	.001	6.	2.	--	12.4
83-02-16	0830	3	10.	2	--	.002	26	10.	--	10.9
83-03-16	0800	3	20.	166	--	L.001	20.	L2.	--	11.4
83-04-13	0815	3	10	13	--	.003	L2	L2.	--	12.4
83-05-26	0800	3	5	34	--	.007	--	100.	--	8.9
83-06-15	1230	3	10	28.	--	.001	50.	32.	--	9.5
83-07-13	0800	3	20.	26.	--	.002	--	170.	--	8.7
83-08-17	0815	3	10	11.	--	L.001	--	30	--	8.5
83-09-27	1130	3	L5	3	--	.001	50.	18.	--	9.8
83-10-19	1230	3	5	1.	--	.001	2	L2.	--	12.1
83-11-08	1140	3	5	L1	--	L.001	L10.	8.	--	14.4
83-12-06	1315	3	5.	4	--	L.001	2.	L2.	--	10.4

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-19	0830	3	0.	0	293	240.0	50.8	24.3	226.9	9.1
83-02-16	0830	3	0.	.0	293	240.0	50.5	24.1	225.3	9.0
83-03-16	0800	3	0.	.0	105	86.0	22.6	8.0	89.4	2.9
83-04-13	0815	3	0.	.0	90.	74.0	20.8	7.5	82.8	1.4
83-05-26	0800	3	0.	.0	94.	77.0	20.0	7.5	80.8	1.4
83-06-15	1230	3	0	0	85.	70.0	19.0	6.5	74.2	1.2
83-07-13	0800	3	0.	0	79.	65.0	17.5	5.9	68.0	1.0
83-08-17	0815	3	0	.0	74.	61.0	17.1	6.0	67.4	.7
83-09-27	1130	3	8.	6.6	252.	220.0	32.5	24.4	181.6	9.7
83-10-19	1230	3	0.	.0	286.	235.0 06L	47.2	23.6	215.0	9.1
83-11-08	1140	3	0	.0	245.	202.0 06L	40.7	23.6	198.8	9.6
83-12-06	1315	3	0.	.0	243	199.0 06L	26.8	27.3	179.3	10.7

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-19	0830	3	1.2	1.0	.12	7.	11.0	248.	--	--
83-02-16	0830	3	1.7	1.2	.11	7.	11.0	249.	--	--
83-03-16	0800	3	.5	.4	L.05	7.	2.8	96.	--	--
83-04-13	0815	3	.4	.3	L.05	5	2.4	82.	--	--
83-05-26	0800	3	.3	.3	L.05	5.	3.0	84	--	--
83-06-15	1230	3	.3	.4	.07	4.	2.6	76.	--	--
83-07-13	0800	3	.2	.3	.06	5.	2.5	71.	--	--
83-08-17	0815	3	.2	.3	L.05	3.	2.0	65	--	--
83-09-27	1130	3	1.5	1.0	.12	6.	8.7	216.	--	--
83-10-19	1230	3	1.1	1.1	.15 08L	7.	10.0 02L	240.	--	--
83-11-08	1140	3	1.3	1.0	.13 08L	6	9.1 02L	213.	--	--
83-12-06	1315	3	1.6	1.0	--	9.	12.2 02L	208.	--	--

STATION - 00AL11AA0001 LAT. 49D 1M 18S LONG 112D 58M 18S
NORTH MILK RIVER NEAR THE INTERNATIONAL BOUNDARY, ALBERTA

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-19	0830		3	006	L 003	Q 003	--	51	51	L 01	Q 52
83-02-16	0830		3	011	007	004	--	50	47	L 01	Q 48
83-03-16	0800		3	190	003	187	--	13	12	32	44
83-04-13	0815		3	029	006	023	--	08	--	07	--
83-05-26	0800		3	030	L 003	Q 027	--	10	10	06	16
83-06-15	1230		3	020	L 003	Q 017	--	08	10	05	15
83-07-13	0800		3	021	003	018	--	11	12	05	17
83-08-17	0815		3	023	007	016	--	08	09	04	13
83-09-27	1130		3	010	008	002	--	18	17	03	20
83-10-19	1230		3	005	003	002	--	20	16	L 01	Q 17
83-11-08	1140		3	003	003	000	--	16	17	02	19
83-12-06	1315		3	010	005	005	--	38	40	L 01	Q 41

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-19	0830		3	42	L 1	1 7	11	1 8	07	L 0005	L 0005
83-02-16	0830		3	44	L 1	2 6	19	2 8	06	0005	L 0005
83-03-16	0800		3	08	L 1	1 3	2 90	4 2	L 02	L 0005	L 0005
83-04-13	0815		3	04	L 1	8	53	1 3	02	L 0005	L 0005
83-05-26	0800		3	05	L 1	1 0	53	1 5	02	L 0005	L 0005
83-06-15	1230		3	05	L 1	1 0	37	1 4	03	L 0005	L 0005
83-07-13	0800		3	07	L 1	9	37	1 3	L 02	L 0005	L 0005
83-08-17	0815		3	03	L 1	1 2	35	1 6	L 02	0008 08D	L 0001 08D
83-09-27	1130		3	04	L 1	1 9	20	2 1	07	0012 08D	0001 08D
83-10-19	1230		3	04	L 1	1 8	L 01	Q1 8	05	0016 08D	0001 08D
83-11-08	1140		3	07	L 1	2 7	12	2 8	06	0016 08D	0002 08D
83-12-06	1315		3	32	L 1	1 8	03	1 8	07	0018 08D	0001 08D

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-19	0830		3	--	--	--	L 01	--	L 04	L 02	--
83-02-16	0830		3	--	--	--	L 01	--	L 04	L 02	--
83-03-16	0800		3	--	--	--	L 01	--	L 04	L 02	--
83-04-13	0815		3	--	--	--	L 01	--	L 04	L 02	--
83-05-26	0800		3	--	--	--	L 01	--	L 04	L 02	--
83-06-15	1230		3	--	--	--	L 01	--	L 04	L 02	--
83-07-13	0800		3	--	--	--	L 01	--	L 04	L 02	--
83-08-17	0815		3	--	--	--	L 01	--	04	L 02	--
83-09-27	1130		3	--	--	--	L 01	--	L 04	L 02	--
83-10-19	1230		3	--	--	--	L 01	--	L 04	L 02	--
83-11-08	1140		3	--	--	--	L 02	--	L 04	L 02	--
83-12-06	1315		3	--	--	--	L 02	--	L 04	L 02	--

FOOTNOTE L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00AL11AA0002 LAT 49D 5M 22S LONG 112D 24M 8S
MILK RIVER NEAR WESTERN CROSSING OF INTERNATIONAL BOUNDARY, ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C	02061L TEMP. WATER DEG. C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-18	1145	3	2.0	21.4	784	706	8.1	7.9	4.2	2.9
83-02-15	1215	3	1.0	16.4	606	597	8.2	7.9	3.8	2.0
83-03-15	1145	3	4.0	19.5	353	325	7.7	8.2	74.0	52.0
83-04-12	1200	3	4.0	25.2	457	439	8.2	8.4	9.0	4.7
83-05-25	1315	3	18.0	21.2	444	448	8.4	8.5	14.0	8.6
83-06-15	1115	3	16.0	21.9	448	440	8.7	8.6	7.0	5.0
83-07-12	1130	3	18.0	17.6	456	441	8.5	8.7	7.0	4.8
83-12-06	1215	3	.5	9.5	1160	1100	8.1	8.0	1.0	1.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR MG/L	10501L RESIDUE FIXED NONFILTR MG/L	08717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	78103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED BIO O2 MG/L
83-01-18	1145	3	10	5	--	.003	7	6	--	14.6
83-02-15	1215	3	5	3	--	.001	--	8	--	12.5
83-03-15	1145	3	30	102	--	L.001	20	10	--	11.9
83-04-12	1200	3	20	9	--	.001	--	2	--	12.5
83-05-25	1315	3	10	10	--	.003	G160	G160	--	8.9
83-06-15	1115	3	10	3	--	.001	770	400	--	9.2
83-07-12	1130	3	20	6	--	.001	350	131	--	8.9
83-12-06	1215	3	10	4	--	.003	--	51	--	10.8

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10502L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-18	1145	3	0	0	378	310.0	58.0	34.7	287.7	50.0
83-02-15	1215	3	0	0	293	240.0	54.8	26.7	246.8	44.0
83-03-15	1145	3	0	0	183	150.0	33.2	15.5	146.7	20.0
83-04-12	1200	3	1	1.1	253	210.0	45.9	21.6	203.5	24.0
83-05-25	1315	3	6	4.7	251	215.0	42.0	21.7	194.2	23.0
83-06-15	1115	3	6	4.7	214	185.0	31.4	22.4	170.6	32.0
83-07-12	1130	3	8	5.4	198	175.0	25.2	22.4	155.1	39.0
83-12-06	1215	3	0	0	266	218.0 06L	34.3	51.7	298.5	123.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-18	1145	3	2.3	5.0	12	106	8.4	450	--	--
83-02-15	1215	3	1.7	4.1	10	94	6.4	376	--	--
83-03-15	1145	3	2.1	2.6	08	32	7.2	203	--	--
83-04-12	1200	3	1.6	2.3	10	38	4.6	264	--	--
83-05-25	1315	3	1.4	1.9	13	32	6.8	258	--	--
83-06-15	1115	3	1.6	2.0	19	46	8.6	255	--	--
83-07-12	1130	3	1.9	2.6	.17	54	7.0	257	--	--
83-12-06	1215	3	3.8	11.8	--	277	9.2 02L	642	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-18	1145	3	.010	.006	.004	--	.45	.45	.03	.48
83-02-15	1215	3	.006	.005	.001	--	.38	.39	L.01	0.40
83-03-15	1145	3	.140	.012	.128	--	.35	.36	.07	.43
83-04-12	1200	3	.013	.007	.006	--	.14	.14	.07	.21
83-05-25	1315	3	.020	.008	.012	--	.18	.18	.05	.23
83-06-15	1115	3	.016	.006	.010	--	.23	.24	.03	.27
83-07-12	1130	3	.016	.005	.011	--	.10	.10	.02	.12
83-12-06	1215	3	.004	.003	.001	--	.39	.38	L.01	0.39

STATION - 00AL11AA0002 LAT 49D 5M 22S LONG 112D 24M 05
MILK RIVER NEAR WESTERN CROSSING OF INTERNATIONAL BOUNDARY, ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-18	1145	3	23	L 1	4 1	22	4 3	11	0005	0007
83-02-15	1215	3	27	L 1	2 6	16	2 8	07	0005	0007
83-03-15	1145	3	08	L 1	5 5	49	6 1	08	0005	L 0005
83-04-12	1200	3	L 01	L 1	2 8	37	3 2	04	0007	L 0005
83-05-25	1315	3	L 01	L 1	4 2	33	4 5	05	0009	L 0005
83-06-15	1115	3	L 01	L 1	4 2	22	4 4	11	0015	L 0005
83-07-12	1130	3	L 01	L 1	5 2	16	5 4	09	0025	L 0005
83-12-06	1215	3	15	L 1	5 4	13	5 5	13	0025 08D	0007 08D

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE AL MG/L	47301P SILVER EXTRBLE AG MG/L	25304P MANGANESE EXTRBLE MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-18	1145	3	--	--	--	L 01	--	L 04	L 02	--
83-02-15	1215	3	--	--	--	L 01	--	L 04	L 02	--
83-03-15	1145	3	--	--	--	L 01	--	06	L 02	--
83-04-12	1200	3	--	--	--	L 01	--	L 04	L 02	--
83-05-25	1315	3	--	--	--	L 01	--	L 04	L 02	--
83-06-15	1115	3	--	--	--	L 01	--	L 04	L 02	--
83-07-12	1130	3	--	--	--	L 01	--	L 04	L 02	--
83-12-06	1215	3	--	--	--	L 02	--	L 04	L 02	--

FOOTNOTE L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
ALBERTA

STATION - 00AL11AA0003 LAT. 49D 7M 27S LONG 110D 53M 39S
MILK RIVER NEAR EASTERN CROSSING OF INTERNATIONAL BOUNDARY, ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG C	02061L TEMP. WATER DEG C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-18	0900	3	2.0	22.4	1232.	1200	8.2	8.0	3.2	2.4
83-02-15	0845	3	1.0	15.8	592	580	8.6	8.2	11.0	10.0
83-03-15	0845	3	2.5	19.5	605	565	8.5	8.3	180.0	150.0
83-04-12	0845	3	2.0	25.5	238	236	7.8	8.1	196.0	140.0
83-05-25	0830	3	14.0	20.5	508	498	8.3	8.4	60.0	42.0
83-06-15	0830	3	16.0	21.8	220	217	8.0	8.3	140.0	110.0
83-07-12	0830	3	18.0	17.3	207	212	7.8	7.9	160.0	130.0
83-08-16	0930	3	18.0	22.6	229	225	7.9	8.3	120.0	--
83-09-27	0830	3	10.5	17.1	829	830	8.8	8.4	2.5	2.5
83-10-19	0830	3	5.0	18.6	816	823	8.4	8.4	2.5	2.2
83-11-08	0840	3	0	11.4	1020	992	8.6	8.3	1.5	2.0
83-12-06	0930	3	5	8.5	2870	2800	7.2	7.2	--	1.2

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-18	0900	3	10	3	--	001	11	9	--	13.2
83-02-15	0845	3	20	11	--	001	12	10	--	13.7
83-03-15	0845	3	30	286	--	009	--	30	--	11.7
83-04-12	0845	3	20	418	--	002	10	10	--	12.5
83-05-25	0830	3	10	101 01R	--	003 17T	--	90 12U	--	9.2
83-06-15	0830	3	10	267	--	004	--	70	--	8.5
83-07-12	0830	3	10	300	--	010	--	220	--	8.4
83-08-16	0930	3	30	179	--	L.001	--	30	--	8.3
83-09-27	0830	3	L5	4	--	L.001	60	44	--	9.4
83-10-19	0830	3	5	2	--	L.001	20	20	--	11.6
83-11-08	0840	3	5	L1	--	001	2	L2	--	14.6
83-12-06	0930	3	20	23	--	005	L2	L2	--	1.3

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-18	0900	3	0	0	535	440.0	56.1	48.8	341.0	140.0
83-02-15	0845	3	0	0	244	200.0	37.0	21.3	180.1	70.0
83-03-15	0845	3	0	0	232	190.0	37.5	21.0	180.1	65.0
83-04-12	0845	3	0	0	134	110.0	24.6	10.5	104.7	11.0
83-05-25	0830	3	3.	2.4	226	190.0	43.0	20.5	191.8	32.0
83-06-15	0830	3	0	0	121	99.0	22.5	9.2	94.1	8.2
83-07-12	0830	3	0	0	115	94.0	22.8	7.9	88.5	7.7
83-08-16	0930	3	0.	0	101	83.0	21.4	7.5	84.3	15.0
83-09-27	0830	3	7.	6.1	272	235.0	35.2	26.3	196.2	110.0
83-10-19	0830	3	6	5.2	280	240.0 06L	44.1	26.9	220.9	110.0
83-11-08	0840	3	0	0	218	179.0 06L	25.3	31.1	191.2	138.0
83-12-06	0930	3	0	0	341.	280.0 06L	88.8	92.0	600.5	396.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-18	0900	3	3.8	9.1	.16	248	7.7	778	--	004
83-02-15	0845	3	2.3	4.4	.10	116	4.4	375	--	002
83-03-15	0845	3	2.5	4.4	.09	116	4.4	365	--	004
83-04-12	0845	3	.9	.9	L.05	22	3.0	139	--	.002
83-05-25	0830	3	2.1	2.7	.13	76	5.2	296	--	002 04H
83-06-15	0830	3	.8	7	.09	16	3.6	120	--	003
83-07-12	0830	3	.9	7	.10	20.	3.2	120	--	001
83-08-16	0930	3	.7	1.5	.08	29.	1.7	127	--	.002
83-09-27	0830	3	2.4	6.3	.12	200	3.7	525	--	004
83-10-19	0830	3	1.9	6.2	.16 08L	194.	3.4 02L	531	--	.003
83-11-08	0840	3	2.7	8.6	--	264.	3.6 02L	581	--	001
83-12-06	0930	3	4.8	32.7	--	1100	10.9 02L	1893	--	002

STATION - 00AL11AA0003 LAT 49D 7M 27S LONG 110D 53M 39S
MILK RIVER NEAR EASTERN CROSSING OF INTERNATIONAL BOUNDARY, ALBERTA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-18	0900	3	008	007	001	--	72	72	L 01	Q 73
83-02-15	0845	3	024	010	014	--	43	42	08	50
83-03-15	0845	3	260	005	255	--	34	32	06	38
83-04-12	0845	3	300	005	295	--	11	11	67	78
83-05-25	0830	3	093 06R	008 03V	085	--	15 51V	15 51R	01 02R	16
83-06-15	0830	3	200	006	194	--	11	13	34	47
83-07-12	0830	3	220	004	216	--	12	13	37	50
83-08-16	0930	3	160	007	153	--	10	10	30	40
83-09-27	0830	3	015	003	012	--	17	17	03	20
83-10-19	0830	3	009	005	004	--	14	14	05	19
83-11-08	0840	3	006	003	003	--	15	15	03	18
83-12-06	0930	3	012	012	000	--	57	59	06	65

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-18	0900	3	46	L 1	4 1	17	4 3	21	L 0005	0007
83-02-15	0845	3	31	L 1	3 3	45	3 8	10	L 0005	L 0005
83-03-15	0845	3	21	L 1	2 9	41	3 3	09	L 0005	L 0005
83-04-12	0845	3	07	L 1	1 1	4 30	5 4	02	L 0005	L 0005
83-05-25	0830	3	L 01 10R	L 1 06W	3 2 04R	1 10 02R	4 3	06 05V	0006 04V	L 0005 02V
83-06-15	0830	3	07	L 1	1 3	3 10	4 4	05	L 0005	L 0005
83-07-12	0830	3	08	L 1	1 0	2 90	3 9	04	L 0005	L 0005
83-08-16	0930	3	03	L 1	1 0	5 00	6 0	03	0010 08D	L 0001 08D
83-09-27	0830	3	L 01	4	2 7	20	2 9	13	0021 08D	0002 08D
83-10-19	0830	3	L 01	L 1	2 8	13	2 9	13	0002 08D	0001 08D
83-11-08	0840	3	01	L 1	4 1	19	4 3	15	0004 08D	0003 08D
83-12-06	0930	3	L 01	2 0	15 0	60	15 6	22	0012 08D	L 0001 08D

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE AL MG/L	47301P SILVER EXTRBLE AG MG/L	25304P MANGANESE EXTRBLE MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-18	0900	3	--	--	--	L 01	--	L 04	03	L 001
83-02-15	0845	3	--	--	--	L 01	--	L 04	L 02	L 001
83-03-15	0845	3	--	--	--	L 01	--	L 04	05	015
83-04-12	0845	3	--	--	--	L 01	--	L 04	L 02	015
83-05-25	0830	3	--	--	--	L 01 04T	--	L 04 04T	L 02 11W	006 20W
83-06-15	0830	3	--	--	--	L 01	--	L 04	L 02	010
83-07-12	0830	3	--	--	--	L 01	--	L 04	L 02	012
83-08-16	0930	3	--	--	--	L 01	--	L 04	02	006 02P
83-09-27	0830	3	--	--	--	05	--	L 04	02	001 02P
83-10-19	0830	3	--	--	--	L 01	--	L 04	L 02	L 001 02P
83-11-08	0840	3	--	--	--	10	--	L 04	L 02	001 02P
83-12-06	0930	3	--	--	--	M0	--	09	L 02	L 001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-18	0900	3	--	L 002	L 002	L 001	L 001	L 001	23	L 004
83-02-15	0845	3	--	L 002	L 002	002	002	L 001	08	L 004
83-03-15	0845	3	--	L 002	L 002	010	--	L 001	17	005
83-04-12	0845	3	--	003	017	010	037	L 001	20	L 004
83-05-25	0830	3	--	L 002 20W	004 20W	003 20W	011 20W	L 001 20W	12 20W	L 004 20W
83-06-15	0830	3	--	L 002	005	007	021	L 001	10	L 004
83-07-12	0830	3	--	002	012	008	026	002	22	L 004
83-08-16	0830	3	--	002 02P	008 02P	006 05P	020 05P	L 001 02P	20 01P	002 02P
83-09-27	0830	3	--	L 001 02P	001 02P	001 05P	001 05P	L 001 02P	24 01P	L 001 02P
83-10-19	0830	3	--	L 001 02P	L 001 02P	L 001 05P	L 001 05P	L 001 02P	28 01P	L 001 02P
83-11-08	0840	3	--	L 001 02P	L 001 02P	L 001 05P	L 001 05P	L 001 02P	24 01P	L 001 02P
83-12-06	0830	3	--	002 02P	006 02P	002 05P	004 05P	L 001 02P	L 10 01P	L 001 02P

STATION - 00AL11AA0003 LAT 49° 7M 27S LONG 110° 53M 39S
MILK RIVER NEAR EASTERN CROSSING OF INTERNATIONAL BOUNDARY ALBERTA

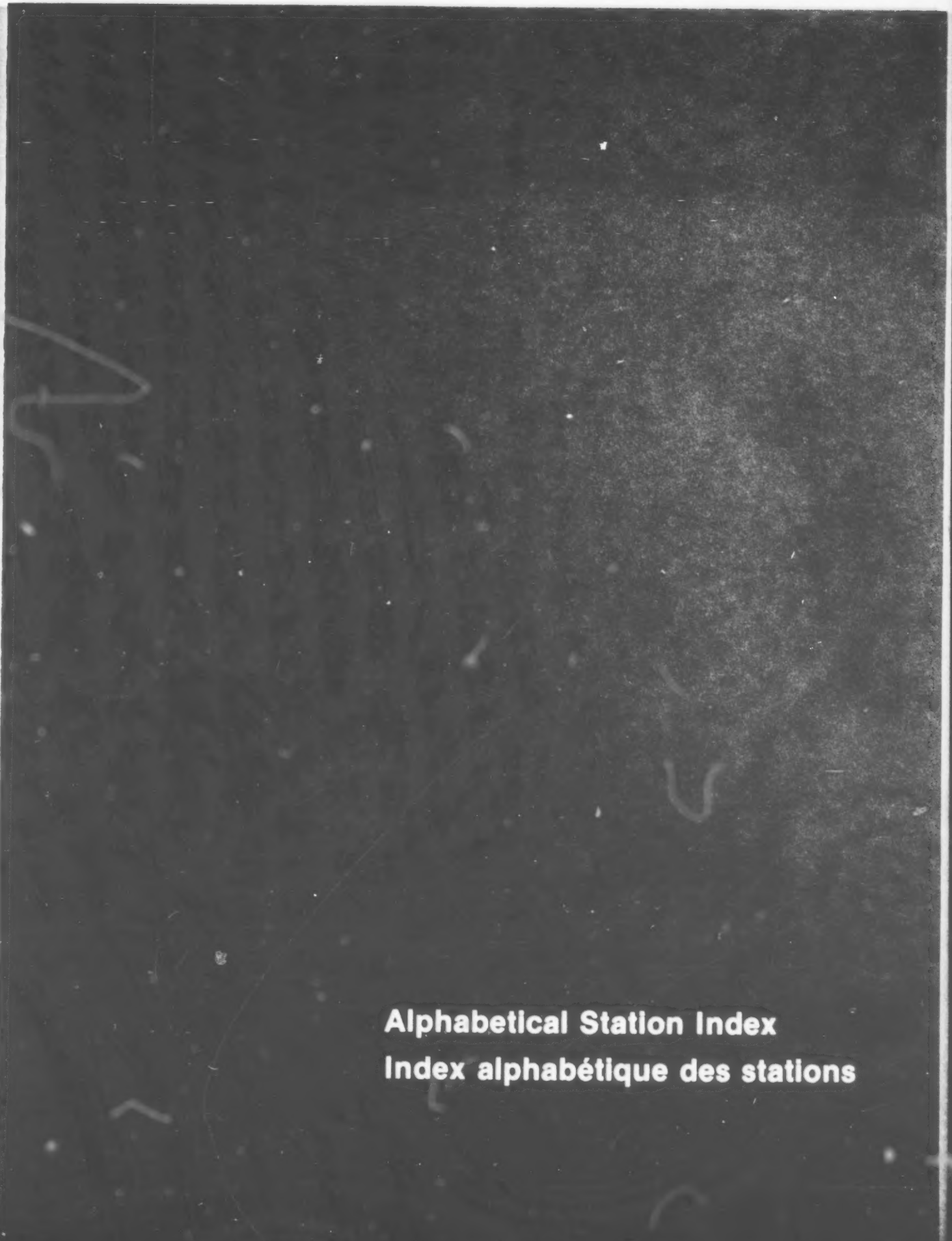
DATE YMD/AMJ	TIME/ HEURE	SUB ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811 HEXACHLORO-BENZENE UG/L	18075 ALPHA-BHC UG/L	18070 GAMMA-BHC (LINDANE) UG/L	18130 ALDRIN UG/L	18010 P,P'-TDE UG/L	18020 P,P'-DDE UG/L	18005 O,P'-DDT UG/L
83-01-18	0900	3	001	< 001	05	< 001	< 001	< 002	< 001	< 001
83-02-15	0845	3	004	< 00	06	< 001	< 001	< 002	< 001	< 001
83-03-15	0845	3	002	< 001	< 001	< 001	< 001	< 002	< 001	< 001
83-04-12	0845	3	004	< 001	04	< 001	< 001	< 002	< 001	< 001
83-05-25	0830	3	010 35M	< 001 10R	002 25R	< 001 10R	< 001 10R	002 10R	< 001 20R	< 001 05R
83-06-15	0830	3	001	< 001	04	< 001	< 001	< 002	< 001	< 001
83-07-12	0830	3	001	< 001	002	< 001	< 001	< 002	< 001	< 001
83-08-16	0930	3	002	< 001	10	< 001	< 001	< 002	< 001	< 001
83-09-27	0830	3	001							
83-10-19	0830	3	002							
83-11-08	0840	3	004							

DATE YMD/AMJ	TIME/ HEURE	SUB ID/ SOUS-ID	18000 P,P'-DDT UG/L	18012 P,P'-METHOXY CHLOR UG/L	18140 ENDRIN UG/L	18040 ALPHA-ENDOSULFAN UG/L	18045 BETA-ENDOSULFAN UG/L	18048 HEPTACHLOR UG/L	18085 HEPTACHLOR EPOXIDE UG/L	18150 MEDD (DIELDRIN) UG/L
83-01-18	0900	3	< 004	< 01	009	001	003	001	< 002	< 002
83-02-15	0845	3	< 004	< 0	001	< 001	003	< 001	< 002	< 002
83-03-15	0845	3	< 004	< 01	< 002	< 001	< 003	< 001	< 002	< 002
83-04-12	0845	3	< 004	< 01	< 002	< 001	< 003	< 001	< 002	< 002
83-05-25	0830	3	< 004 00R	< 01 10R	002 40R	< 001 50R	< 001 55R	< 001 40R	< 002 45R	< 002 50R
83-06-15	0830	3	< 004	< 0	< 002	< 001	< 001	< 001	< 002	< 002
83-07-12	0830	3	< 004	< 01	< 002	< 001	< 001	< 001	< 002	< 002
83-08-16	0930	3	< 004	< 01	< 002	< 01	< 003	< 001	< 002	< 002

DATE YMD/AMJ	TIME/ HEURE	SUB ID/ SOUS-ID	18125 MIREX UG/L	18060 ALPHA-(CIS) CHLORDANE UG/L	18065 GAMMA-(TRANS) CHLORDANE UG/L	18520 MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-18	0900	3	< 001	< 003	< 002	< 2	< 004	< 009	< 004	< 002
83-02-15	0845	3	< 001	< 003	< 002	< 2	< 004	009	< 004	< 002
83-03-15	0845	3	< 001	< 003	< 002	< 2	004	< 009	< 004	< 002
83-04-12	0845	3	< 001	< 003	< 002	< 2	< 004	< 009	< 004	< 002
83-05-25	0830	3	< 001 25R	< 003 60R	< 002 15R	< 2 20R	005 00R	< 009 50R	< 004 55R	< 002 10R
83-06-15	0830	3	< 001	< 003	< 002	< 2	< 004	< 009	< 004	< 002
83-07-12	0830	3	< 001	< 003	< 002	< 2	< 004	< 009	< 004	< 002
83-08-16	0930	3	< 001	< 003	< 002	< 2	< 004	< 009	< 004	< 002

DATE YMD/AMJ	TIME/ HEURE	SUB ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18150P AROCLOR 1242 (PCB'S) UG/L	18160P AROCLOR 1254 (PCB'S) UG/L	18162P AROCLOR 1260 (PCB'S) UG/L	18164P AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-18	0900	3	< 004	< 2	< 002	< 002	< 005	< 002		
83-02-15	0845	3	< 004	2	< 002	< 002	< 005	< 002		
83-03-15	0845	3	< 004		< 002	< 002	< 005	< 002		
83-04-12	0845	3	< 004	< 2	< 002	< 002	< 005	< 002		
83-05-25	0830	3	< 004 40W	< 2 01W	< 002 59R	< 002 60R	< 005 62R	< 002 64R		
83-06-15	0830	3	< 004	< 2	< 002	< 002	< 005	< 002		
83-07-12	0830	3	< 004	< 2	< 002	< 002	< 005	< 002		
83-08-16	0930	3	< 004	< 2	< 002	< 002	< 005	< 002		

FOOTNOTE < - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN < - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE



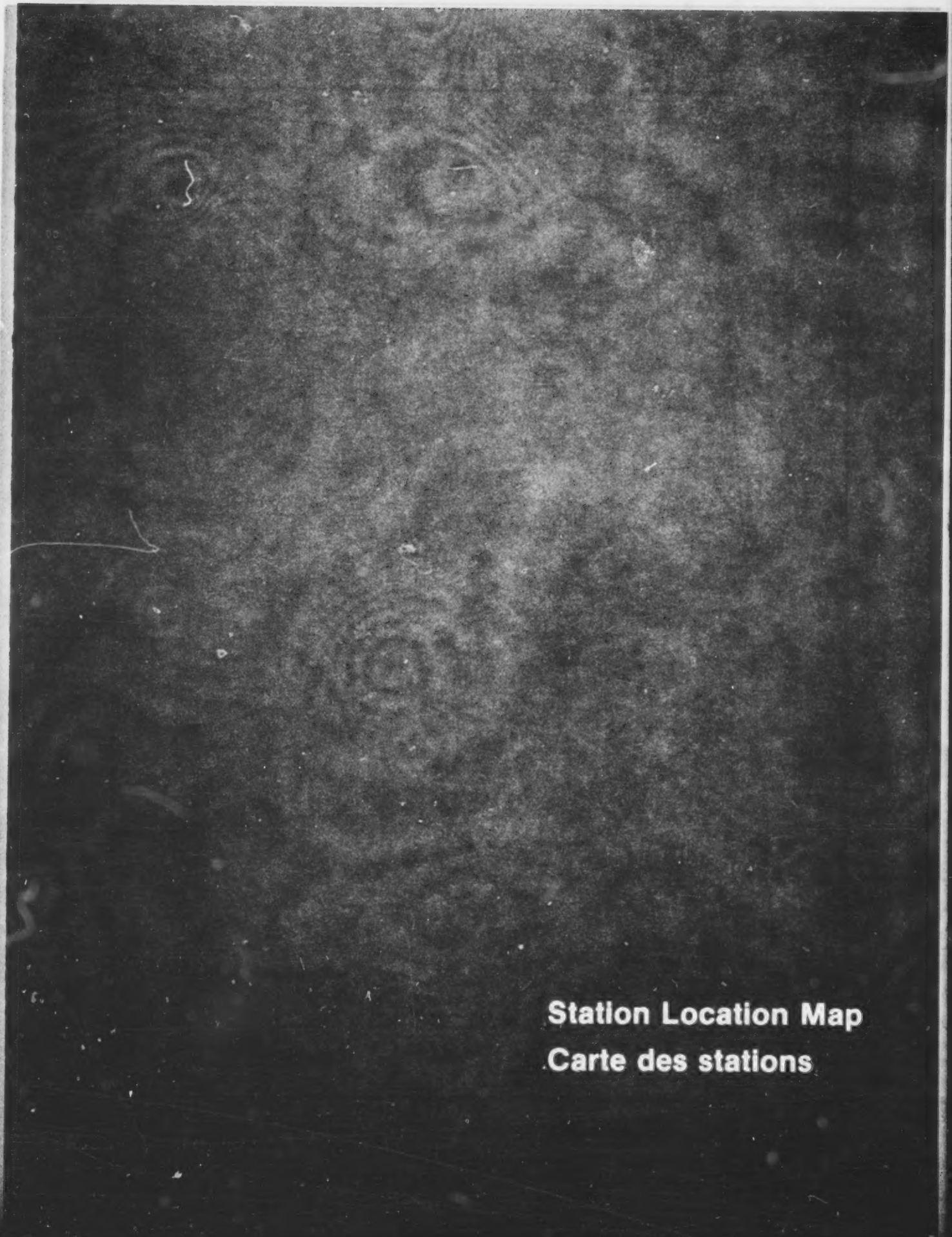
Alphabetical Station Index
Index alphabétique des stations

Location Description	Station Number	Latitude D	M	S	Longitude D	M	S	Page Number	Map Number
ATHABASCA RIVER AT ATHABASCA, ALBERTA	00AL07BE0001 97900S 001	54	43	18	113	17	8	60	1
ATHABASCA RIVER AT HWY 16 BRIDGE BELOW CONFLUENCE WITH SNARING RIVER, JASPER NATIONAL PARK, ALBERTA	00AL07AA0023 97900S 006	53	2	30	118	5	13	57	2
ATHABASCA RIVER AT HWY 93A, ATHABASCA FALLS, JASPER NATIONAL PARK, ALBERTA	00AL07AA0015 97900S 006	52	39	51	117	52	50	55	3
BEAVER RIVER AT BEAVER CROSSING, ALBERTA	00AL08AD0001 97900S 006	54	21	15	110	12	42	52	4
BELLY RIVER AT HWY 6, WATERTON LAKES NATIONAL PARK, ALBERTA	00AL05AD0080 97900S 003	49	3	6	113	41	7	9	5
BENCH MARK CREEK NEAR FORT SMITH, ALBERTA	00AL07NB0003 97900S 006	59	48	50	111	57	43	71	6
BOW RIVER ABOUT 4.5 KM ABOVE CANMORE BELOW SE BOUNDARY OF BANFF NAT'L PARK ALBERTA	00AL05BE0013 97900S 005	51	7	22	115	23	12	23	7
BOW RIVER AT COCHRANE, ALBERTA	00AL05BH0017 97900S 005	51	10	26	114	28	0	26	8
BOW RIVER AT HIGHWAY 1 ABOVE LAKE LOUISE, ALBERTA	00AL05BA0011 97900S 005	51	26	35	116	12	42	20	9
BOW RIVER NEAR MOUTH, ALBERTA	00AL05BN0001 97900S 012	50	2	47	111	35	26	29	10
BREWSTER CREEK AT HWY 1 NEAR MOUTH, BANFF NATIONAL PARK, ALBERTA	00AL05BB0009 97900S 005	51	9	42	115	40	13	22	11
MILK RIVER NEAR EASTERN CROSSING OF INTERNATIONAL BOUNDARY, ALBERTA	00AL11AA0003 97900S 031	49	7	27	110	53	39	76	12
MILK RIVER NEAR WESTERN CROSSING OF INTERNATIONAL BOUNDARY, ALBERTA	00AL11AA0002 97900S 025	49	5	22	112	24	6	74	13
NORTH MILK RIVER NEAR THE INTERNATIONAL BOUNDARY, ALBERTA	00AL11AA0001 97900S 001	49	1	18	112	58	18	72	14
NORTH SASKATCHEWAN RIVER AT WHIRLPOOL POINT, ALBERTA	00AL05DA0001 97900S 009	52	0	10	116	28	18	41	15
NORTH SASKATCHEWAN RIVER AT DEVON, ALBERTA	00AL05DF0008 97900S 009	53	22	8	113	45	5	43	16

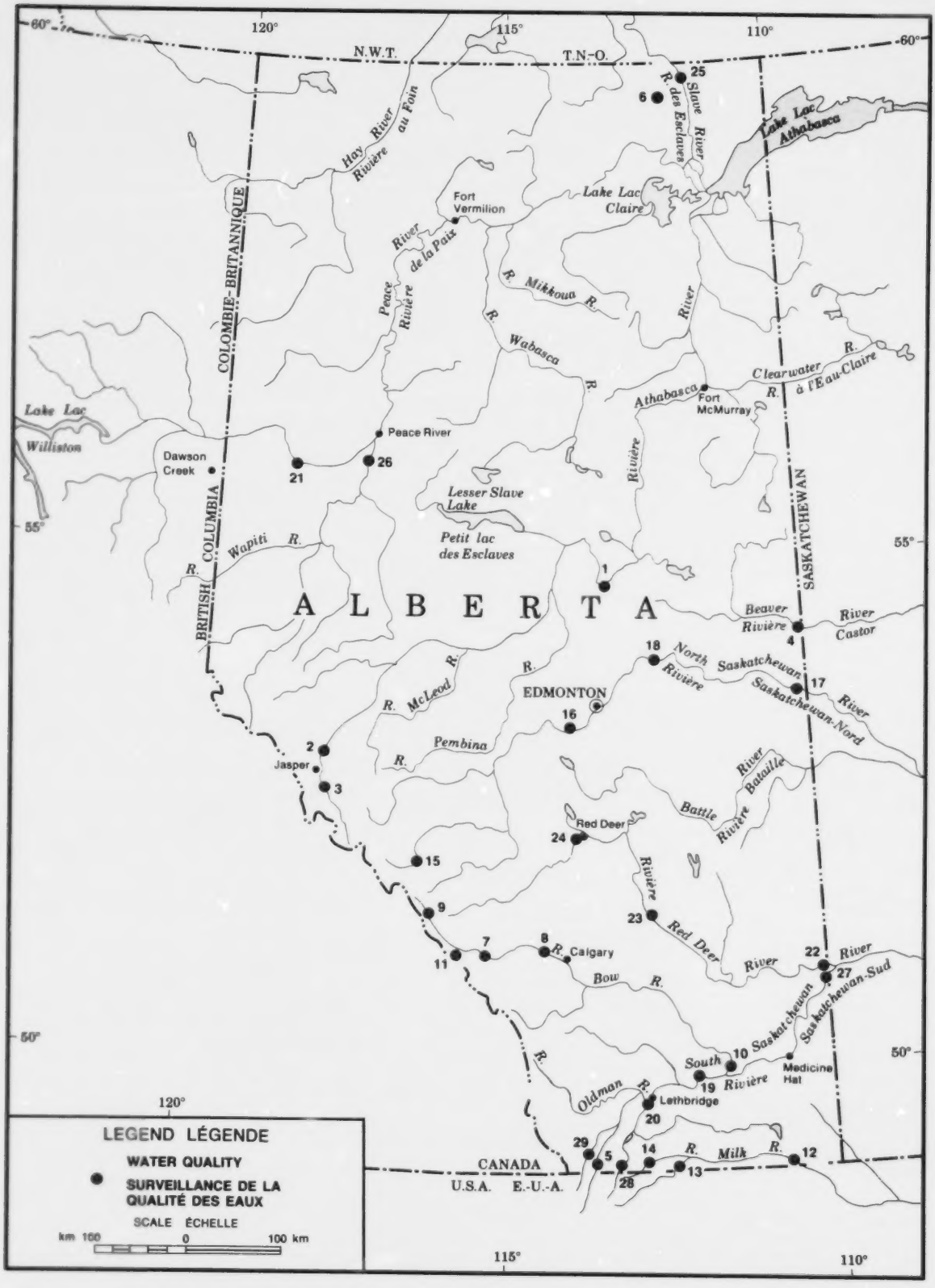
ALBERTA

WATER QUALITY STATIONS: ALPHABETICAL INDEX

Location Description	Station Number	Latitude D	M	S	Longitude D	M	S	Page Number	Map Number
NORTH SASKATCHEWAN RIVER AT LEA PARK, ALBERTA	**00AL05EF0001** 97900S 003	53	39	29	110	20	20	**49**	**17**
NORTH SASKATCHEWAN RIVER AT PAKAN, ALBERTA	**00AL05EC0005** 97900S 009	54	0	10	112	23	53	**46**	**18**
OLDMAN RIVER AT HWY 36 NORTH OF TABER, ALBERTA	**00AL05AG0001** 97900S 027	49	57	38	112	5	3	**14**	**19**
OLDMAN RIVER NEAR LETHBRIDGE, ALBERTA	**00AL05AD0002** 97900S 007	49	42	29	112	52	30	**3**	**20**
PEACE RIVER AT HWY 2, DUNVEGAN, ALBERTA	**00AL07FD0002** 97900S 003	55	55	18	118	36	32	**63**	**21**
RED DEER RIVER AT BINDLOSS, ALBERTA	**00AL05CK0001** 97900S 004	50	54	10	110	17	48	**38**	**22**
RED DEER RIVER AT DRUMHELLER, ALBERTA	**00AL05CE0001** 97900S 001	51	28	8	112	42	29	**35**	**23**
RED DEER RIVER AT HWY 2 ABOVE RED DEER, ALBERTA	**00AL05CC0004** 97900S 012	52	16	0	113	51	47	**32**	**24**
SLAVE RIVER AT FITZGERALD, ALBERTA	**00AL07NB0001** 97900S 001	59	52	9	111	35	8	**69**	**25**
SMOKY RIVER AT WATINO, ALBERTA	**00AL07GJ0001** 97900S 001	55	42	56	117	37	18	**66**	**26**
SOUTH SASKATCHEWAN RIVER AT HWY 41, ALBERTA	**00AL05AK0001** 97900S 001	50	44	15	110	5	44	**17**	**27**
ST. MARY RIVER NEAR INTERNATIONAL BOUNDARY (FORMERLY NEAR KIMBALL), ALBERTA	**00AL05AE0001** 97900S 027	49	0	10	113	18	50	**11**	**28**
WATERTON RIVER AT HWY 6 BRIDGE NEAR WATERTON LAKES NATIONAL PARK, ALBERTA	**00AL05AD0005** 97900S 003	49	6	50	113	50	20	**6**	**29**



Station Location Map
Carte des stations



WATER QUALITY BRANCH MONITORING STATIONS 1983

STATIONS DE SURVEILLANCE DE LA DIRECTION DE LA QUALITÉ DES EAUX 1983

MANITOBA

Detailed Data / Données détaillées

STATION - 00MA04AB0001 LAT. 58D 25M 54S LONG. 92D 47M 17S
HAYES RIVER BELOW JUNCTION WITH GODS RIVER, MANITOBA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-05	1300	1	.0	16.8	--	187.	--	7.6	--	1.0
83-04-14	1530	1	.0	22.5	--	186.	--	7.7	--	1.0
83-06-20	1220	1	17.0	22.5	118.	137.	8.1	8.0	--	3.5
83-08-15	1100	1	17.0	22.9	164.	173.	--	8.0	--	2.8
83-09-26	1041	1	7.0	23.6	137.	158.	--	7.9	--	12.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-05	1300	1	20.	3	--	--	--	--	--	--
83-04-14	1530	1	20.	L1	--	--	--	--	--	--
83-06-20	1220	1	50.	11.	--	--	--	--	--	--
83-08-15	1100	1	30.	2	--	--	--	--	--	--
83-09-26	1041	1	60.	17	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-05	1300	1	0.	.0	119.	98.0	31.2	5.6	101.0	2.3
83-04-14	1530	1	0.	.0	117.	96.0	30.0	5.7	98.4	3.0
83-06-20	1220	1	0	.0	79.	65.0	22.5	3.2	69.4	1.4
83-08-15	1100	1	0.	.0	102.	84.0	27.8	5.0	90.0	2.0
83-09-26	1041	1	0.	.0	89.	73.0	23.5	3.4	72.7	1.8

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-05	1300	1	.8	1.7	L.05	2.	3.1	105.	--	--
83-04-14	1530	1	.7	1.8	L.05	2.	3.4	104.	--	--
83-06-20	1220	1	.4	1.1	L.05	2.	2.0	72.	--	--
83-08-15	1100	1	.5	1.5	.10	3.	3.0	93.	--	--
83-09-26	1041	1	.4	1.7	L.05	5.	3.5	83.	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-05	1300	1	.011	.003 03L	.008	--	--	.34	.05	.39
83-04-14	1530	1	.010	.003 03L	.007	--	--	.35	.03	.38
83-06-20	1220	1	.020	.008 03L	.012	--	--	.28	.05	.33
83-08-15	1100	1	.023	.003 03L	.020	--	--	.26	L.01	Q.27
83-09-26	1041	1	.037	L.003 03L	Q.034	--	--	.34	.05	.39

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-05	1300	1	.05	--	8.5	.32	8.8	.05 05L	L.0005 04L	L.0005 02L
83-04-14	1530	1	.11	--	7.5	.24	7.7	.04 05L	L.0005 04L	L.0005 02L
83-06-20	1220	1	L.01	--	9.4	.45	9.9	.08 05L	L.0005 04L	L.0005 02L
83-08-15	1100	1	L.01	--	8.4	.45	8.9	.06 05L	.0012 08L	L.0001 08L
83-09-26	1041	1	L.01	--	12.0	.47	12.5	--	.0007 08L	L.0001 08L

DETAILED WATER QUALITY 1983
MANITOBA

STATION - OOMA04AB0001
HAYES RIVER BELOW JUNCTION WITH GODS RIVER, MANITOBA LAT. 56D 25M 54S LONG. 92D 47M 17S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-05	1300	1	--	--	.01	--	.14	--	--	L.001
83-04-14	1530	1	--	--	.01	--	.20	--	--	L.001
83-06-20	1220	1	--	--	.02	--	.35	--	--	L.001
83-08-15	1100	1	--	--	--	--	--	--	--	.001 02P
83-09-26	1041	1	--	--	--	--	--	--	--	.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-05	1300	1	--	L.002	L.002	.006	010	L.001	L.05	L.004
83-04-14	1530	1	--	L.002	L.002	.003	003	L.001	L.05	L.004
83-06-20	1220	1	--	L.002	L.002	.003	.004	L.001	L.05	L.004
83-08-15	1100	1	--	L.001 02P	.002 02P	.007 05P	.004 05P	L.001 02P	L.10 01P	L.001 02P
83-09-26	1041	1	--	L.001 02P	.001 02P	.003 05P	003 05P	L.001 02P	L.10 01P	L.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-05	1300	1	--	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-04-14	1530	1	--	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-06-20	1220	1	--	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-08-15	1100	1	--	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-09-26	1041	1	--	L.001	.002	L.001	L.001	L.002	L.001	L.001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-05	1300	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-14	1530	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-20	1220	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-15	1100	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-26	1041	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-05	1300	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-04-14	1530	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-06-20	1220	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-15	1100	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-09-26	1041	1	L.001	L.003	L.002	L.2	.008	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-05	1300	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-14	1530	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-20	1220	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-15	1100	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-09-26	1041	1	L.004	L.2	--	--	--	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00MA05KH0001
SASKATCHEWAN RIVER ABOVE CARROT RIVER, MANITOBA

LAT. 53D 50M 30S LONG. 101D 20M 3S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-25 1430 482	.0	17.3	448.	407.	8.1	7.9	11.0	7.6
83-03-02 1820 482	.0	20.6	414.	407.	8.0	7.9	9.4	6.6
83-03-30 1445 482	1.0	21.6	403.	375.	8.0	7.7	5.2	3.1
83-05-26 1441 482	8.0	22.8	301.	321.	8.4	8.0	49.0	34.0
83-06-14 1400 482	15.0	13.7 61R	340.	331. 41R	8.0	8.0 01R	56.0	38 C 73R
83-07-19 1450 482	22.0	6.6	360.	345.	8.1	8.1	47.0	33.0
83-08-23 1620 482	17.0	22.2	313.	283.	8.0	8.2	76.0	53.0
83-09-20 1837 482	7.0	14.2	338.	340.	8.0	8.1	172.0	67.0
83-10-18 1534 482	4.0	15.2	345.	331.	8.0	8.1	64.0	45.0
83-12-06 1350 482	.2	7.7	360.	424	8.0	8.0	7.4	3.2

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-25 1430 482	20.	21.	17.	.003	2.	L2.	--	10.6
83-03-02 1820 482	10.	16.	13.	L.001	8.	L2.	--	9.4
83-03-30 1445 482	30.	5.	4	.002	--	--	--	10.3
83-05-26 1441 482	30.	71.	65.	.020	8.	2.	--	10.2
83-06-14 1400 482	40. 21R	84. 01R	76. 01R	.005 17T	16. 02U	8. 12U	--	7.5
83-07-19 1450 482	30.	45.	43.	--	52.	6.	--	7.5
83-08-23 1620 482	20.	69.	63.	.020	370.	4.	--	8.4
83-09-20 1837 482	10.	119.	110.	.005	30.	16.	--	10.6
83-10-18 1534 482	10.	79.	71.	.010	16.	2.	--	12.0
83-12-06 1350 482	15.	6.	4.	.001	10.	L2.	--	13.5

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-25 1430 482	0.	.0	201.	165.0	49.1	17.7	195.5	20.0
83-03-02 1820 482	0.	.0	189.	155.0	47.5	16.6	186.9	16.0
83-03-30 1445 482	0	.0	177.	145.0	43.9	15.5	173.4	16.0
83-05-26 1441 482	0.	.0	134.	110.0	32.0	12.0	129.3	15.0
83-06-14 1400 482	0.	.0	146.	120.0 01R	34.4 03R	12.2 02R	136.1	15.0 03R
83-07-19 1450 482	0.	.0	158.	130.0	38.1	14.2	153.6	13.0
83-08-23 1620 482	0.	.0	134.	110.0	30.9	11.9	126.1	10.0
83-09-20 1837 482	0.	.0	146.	120.0	38.9	12.1	146.9	15.0
83-10-18 1534 482	0.	.0	152.	125.0 06L	34.8	13.0	140.4	17.0
83-12-06 1350 482	0.	.0	166.	136.0 06L	37.2	14.2	151.3	15.4

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-25 1430 482	2.3	8.5	.11	56.	2.5	255.	--	.002
83-03-02 1820 482	2.2	6.7	.15	52.	3.2	237.	--	.002
83-03-30 1445 482	2.2	6.6	.06	46.	3.2	220.	--	.004
83-05-26 1441 482	2.7	12.0	.07	30.	2.8	173.	--	.003
83-06-14 1400 482	2.6 03R	11.0 06R	.09 05R	28. 08R	--	--	--	.002 04N
83-07-19 1450 482	2.2	5.0	.11	38.	3.8	192.	--	.003
83-08-23 1620 482	2.2	5.6	.15	28.	3.2	158.	--	.005
83-09-20 1837 482	2.5	6.2	.10	46.	1.9	195.	--	.004
83-10-18 1534 482	2.1	6.6	.10 08L	38.	2.5 02L	189.	--	.003
83-12-06 1350 482	2.4	7.1	.14 08L	44.	1.6 02L	203.	--	.002

DETAILED WATER QUALITY 1983
MANITOBA

STATION - 00MA05KH0001
SASKATCHEWAN RIVER ABOVE CARROT RIVER, MANITOBA

LAT. 53D 50M 30S LONG. 101D 20M 35S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-25	1430	462	.031	.013	.018	.006	.44	.44	.08	.52
83-03-02	1820	462	.040	.018	.022	.009	.51	.51	.07	.58
83-03-30	1445	462	.025	--	--	--	.48	.50	.04	.54
83-05-26	1441	462	.076	.008	.068	L.003	.29	.28	.22	.50
83-06-14	1400	462	.070 06R	.008 03V	.062 01R	L.003 56V	.31 51V	.32 51R	.23 02R	.55
83-07-19	1450	462	.074	.016	.058	L.003	.31	.30	.18	.48
83-08-23	1620	462	.079	.007	.072	L.003	.35	.35	.23	.58
83-09-20	1837	462	.120	.011	.109	L.003	.38	.39	.35	.74
83-10-18	1534	462	.079	.017	.062	L.003	.36	.36	.23	.59
83-12-06	1350	462	.018	.017	.001	.006	.29	.29	.03	.32

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-25	1430	462	.21	.2	4.8	.78	5.6	.09	L.0005	L.0005
83-03-02	1820	462	.33	L.1	3.4	.55	4.0	.07	.0005	L.0005
83-03-30	1445	462	.31	L.1	11.0	.32	11.3	.09	.0005	L.0005
83-05-26	1441	462	.01	L.1	6.2	1.70	7.9	.05	L.0005	L.0005
83-06-14	1400	462	L.01 10R	L.1 06W	7.7 04R	1.90 02R	9.6	.05 05V	.0005 04V	L.0005 02V
83-07-19	1450	462	.04	L.1	7.2	1.40	8.6	.07	.0009 08D	L.0005 08D
83-08-23	1620	462	.05	L.1	8.0	1.70	9.7	.07	.0015 08D	.0002 08D
83-09-20	1837	462	.06	L.1	6.6	2.90	9.5	.06	.0016 08D	.0002 08D
83-10-18	1534	462	.08	L.1	6.7	1.90	8.6	.08	.0015 08D	.0002 08D
83-12-06	1350	462	.06	L.1	7.3	.30	7.6	.07	.0016 08D	.0002 08D
	1350	462	--	--	--	--	--	--	.0016 08L	.0002 08L

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-25	1430	462	.20	--	--	L.01	--	L.04	L.02	.001
83-03-02	1820	462	.08	--	--	L.01	--	L.04	L.02	L.001
83-03-30	1445	462	.10	--	--	L.01	--	L.04	L.02	L.001
83-05-26	1441	462	.16	--	--	.09	--	.04	L.02	L.001
83-06-14	1400	462	.38 02W	--	--	.07 04T	--	L.04 04T	L.02 11W	.005 20W
83-07-19	1450	462	.50	--	--	.08	--	.05	.02	.006
83-08-23	1620	462	.89	--	--	.13	--	.07	L.02	.005 02P
83-09-20	1837	462	.95	--	--	.07	--	.04	L.02	.004 02P
83-10-18	1534	462	.77	--	--	.09	--	L.04	L.02	.007 02P
83-12-06	1350	462	L.10	--	--	L.02	--	.35	L.02	L.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-25	1430	462	L.015	L.002	L.002	L.001	.002	L.001	.07	L.004
83-03-02	1820	462	L.015	L.002	L.002	L.001	.006	L.001	L.05	L.004
83-03-30	1445	462	L.015	L.002	.002	.003	--	L.001	.05	L.004
83-05-26	1441	462	L.015	L.002	L.002	.005	.003	L.001	.08	L.004
83-06-14	1400	462	L.015 02W	L.002 20W	.004 20W	.003 20W	.012 20W	L.001 20W	L.05 20W	L.004 20W
83-07-19	1450	462	L.015	L.002	.008	.004	.005	L.001	.06	L.004
83-08-23	1820	462	--	.001 02P	.005 02P	.005 05P	.011 05P	L.001 02P	.10 01P	L.001 02P
83-09-20	1837	462	--	L.001 02P	.005 02P	.005 05P	.007 05P	L.001 02P	.15 01P	.002 02P
83-10-18	1534	462	.004 03P	L.001 02P	.003 02P	.004 05P	.009 05P	L.001 02P	.16 01P	.003 02P
83-12-06	1350	462	.001 03P	L.001 02P	.002 02P	.002 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P

STATION - 00MA05KH0001
SASKATCHEWAN RIVER ABOVE CARROT RIVER. MANITOBA

LAT. 53D 50M 30S LONG. 101D 20M 35

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-25 1430 462	.002	L.001	.007	L.001	L.001	L.002	L.001	L.001
83-03-02 1820 462	.005	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-03-30 1445 462	.002	L.001	.005	.002	L.001	L.002	L.001	L.001
83-05-26 1441 462	.004	L.001	.004	.001	L.001	L.002	L.001	L.001
83-06-14 1400 462	.007 35W	L.001 11R	L 001 75R	L 001 70R	L.001 30R	L.002 10R	L 001 20R	L 001 05R
83-07-19 1450 462	.007	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-08-23 1620 462	.006	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-09-20 1837 462	.003	L.001	.005	.001	L.001	L.002	L.001	L.001
83-10-18 1534 462	.002	L.001	.006	.001	L.001	L.002	L.001	L.001
83-12-06 1350 462	--	L.001	.006	.001	L.001	L.002	L.001	L.001

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L MEOD (DIELDRIN) UG/L
83-01-25 1430 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-02 1820 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-30 1445 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-26 1441 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-14 1400 462	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R
83-07-19 1450 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-23 1620 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-20 1837 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-18 1534 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-12-06 1350 462	L.001	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-25 1430 462	L.001	L.003	L.002	L.2	.200	L.009	L.004	L.002
83-03-02 1820 462	L.001	L.003	L.002	L.2	.090	L.009	L.004	L.002
83-03-30 1445 462	L.001	L.003	L.002	L.2	.090	L.009	L.004	L.002
83-05-26 1441 462	L.001	L.003	L.002	L.2	.040	L.009	L.004	L.002
83-06-14 1400 462	L.001 25R	L.003 60R	L.002 65R	L.2 20W	.040 00W	L.009 50W	L.004 55W	L.002 10W
83-07-19 1450 462	L.001	L.003	L.002	L.2	.040	L.009	L.004	L.002
83-08-23 1620 462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-09-20 1837 462	L.001	L.003	L.002	L.2	.007	L.009	L.004	L.002
83-10-18 1534 462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-12-06 1350 462	L.001	L.003	L.002	L.2	.004	.025	L.004	L.002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-25 1430 462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-02 1820 462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-30 1445 462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-26 1441 462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-06-14 1400 462	L.004 40W	L.2 01W	L.002 59R	L.002 60R	L.005 62R	L.002 64R	--	--
83-07-19 1450 462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-23 1620 462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-09-20 1837 462	L.004	L.2	--	--	--	L.002	--	--
83-10-18 1534 462	L.004	L.2	--	--	--	L.002	--	--
83-12-06 1350 462	L.004	L.2	--	--	--	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
MANITOBA

STATION - 00MA05LD0001
OVERFLOWING RIVER AT HWY 10 MANITOBA LAT. 53D 9M 15S LONG. 101D 8M 29S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-20	1000	1	.5	21.5	610.	706.	8.0	7.3	--	3.1
83-02-28	1030	1	.5	16.5	--	941.	6.8	7.2	--	1.9
83-04-05	1045	1	.5	20.8	1375.	1380	6.9	7.1	--	2.3
83-04-30	0830	1	2.5	20.8	220.	228.	7.9	7.4	--	3.5
83-05-30	0930	1	13.0	22.7	240.	263.	8.4	7.7	--	1.6
83-06-27	1000	1	18.5	21.4	290.	308.	6.3	7.7	--	2.7
83-08-15	0905	1	19.5	23.1	315.	346.	7.2	7.8	--	1.7
83-09-26	1145	1	12.0	19.3	320.	335.	8.2	7.8	--	2.2
83-10-19	1439	1	3.0	14.9	345.	328.	8.0	7.9	5.0	3.0
83-11-16	0932	1	.5	15.4	387.	378.	7.9	7.7	5.1	3.0
83-12-07	0830	1	.2	6.6	390.	377.	7.4	7.3	4.2	2.5

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-20	1000	1	80.	4.	--	--	--	--	--	4.3
83-02-28	1030	1	80.	6. 01R	--	--	--	--	--	4.8
83-04-05	1045	1	80.	12.	--	--	--	--	--	5.8
83-04-30	0830	1	70.	6.	--	--	--	--	--	12.1
83-05-30	0930	1	110.	3.	--	--	--	--	--	9.0
83-06-27	1000	1	120.	7.	--	--	--	--	--	9.8
83-08-15	0905	1	100.	9.	--	--	--	--	--	7.0
83-09-26	1145	1	100.	2.	--	--	--	--	--	11.7
83-10-19	1439	1	70.	3.	--	--	--	--	--	12.8
83-11-16	0932	1	80.	L1.	--	--	--	--	--	13.0
83-12-07	0830	1	70.	2.	--	--	--	--	--	8.2

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-20	1000	1	0.	.0	374.	307.0	62.7	45.1	342.2	34.0
83-02-28	1030	1	0.	.0	506.	415.0	86.2	57.0	449.9	46.0
83-04-05	1045	1	0.	.0	506.	415.0	94.0	62.0	490.0	136.0
83-04-30	0830	1	0.	0	94.	77.0	17.1	10.9	87.6	13.0
83-05-30	0930	1	0.	.0	122.	100.0	23.3	13.5	113.8	13.0
83-06-27	1000	1	0.	.0	171.	140.0	32.4	16.6	149.2	9.1
83-08-15	0905	1	0.	.0	202.	166.0	36.5	22.2	182.5	7.7
83-09-26	1145	1	0.	.0	146.	120.0	24.4	17.0	130.9	22.0
83-10-19	1439	1	0.	.0	165.	135.0 06L	28.6	19.2	150.5	15.4
83-11-16	0932	1	0	.0	157.	129.0 06L	28.7	18.5	147.8	24.7
83-12-07	0830	1	0.	.0	208.	171.0 06L	35.0	21.9	177.6	15.9

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-20	1000	1	4.0	51.0	.10	23.	14.0	418.	--	.028
83-02-28	1030	1	4.8	70.0	.17	19.	20.0	552.	--	.028
83-04-05	1045	1	6.3	210.0	17	26.	22.0	805.	--	.018
83-04-30	0830	1	2.3	22.0	L.05	6.	6.0	124.	--	.024
83-05-30	0930	1	1.5	16.0	.09	7.	5.5	140.	--	.019
83-06-27	1000	1	1.5	9.9	.08	6.	12.0	171.	--	.017
83-08-15	0905	1	1.3	7.7	.12	9.	16.0	200.	--	.039
83-09-26	1145	1	1.3	31.0	L.05	12.	12.0	192.	--	.018
83-10-19	1439	1	1.6	21.9	--	9.	9.3 02L	186.	--	.004
83-11-16	0932	1	1.8	37.7	.08	12.	9.6 02L	210.	--	.005
	0932	1	--	--	.08 08L	--	--	--	--	--
83-12-07	0830	1	1.7	23.0	.09	11.	10.5 02L	222.	--	.004
	0830	1	--	--	.09 08L	--	--	--	--	--

STATION - 00MA05LD0001
OVERFLOWING RIVER AT HWY 10 MANITOBA LAT. 53D 9M 15S LONG. 101D 8M 29S

DATE	TIME/	SUB-ID/	15406L PHOSPHORUS TOTAL P	15103D PHOSPHORUS TOTAL DISSOLVED P	15901L PHOSPHORUS PARTICULATE (CALCD.) P	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P	07651D NITROGEN DISSOLVED N	07651L NITROGEN DISSOLVED N	07902L NITROGEN PARTICUL. N	07603L NITROGEN TOTAL (CALCD.) N
YMD/AMJ	HEURE	SOUS-ID	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
83-01-20	1000	1	.022	.014 03L	.008	--	--	1.50	.07	1.57
83-04-05	1045	1	.032	.019 03L	.013	--	--	1.50	.08	1.58
83-04-30	0830	1	.040	.025 03L	.015	--	--	.59	.11	.70
83-05-30	0930	1	--	.016 03L	--	--	--	.60	.04	.64
83-06-27	1000	1	.034	.022 03L	.012	--	--	.73	.07	.80
83-08-15	0905	1	.034	.017 03L	.017	--	--	.71	.05	.77
83-09-26	1145	1	.014	.014 03L	.000	--	--	.81	.02	.83
83-10-19	1439	1	.015	.010 03L	.005	--	--	.66	.08	.74
83-11-16	0932	1	.024	.016 03L	.008	--	--	.72	.08	.80
83-12-07	0830	1	.008	.005 03L	.003	--	--	.63	.04	.67

DATE	TIME/	SUB-ID/	07110L NITROGEN DISSOLVED NO3 & NO2 N	07506P NITROGEN TOTAL AMMONIA N	06104L CARBON DISSOLVED ORGANIC C	06902L CARBON ORGANIC PARTICUL. C	06002L CARBON TOTAL ORGANIC (CALCD.)	05105D BORON DISSOLVED B	33104D ARSENIC DISSOLVED AS	34102D SELENIUM DISSOLVED SE
YMD/AMJ	HEURE	SOUS-ID	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
83-01-20	1000	1	.02	--	40.0	.54	40.5	.20 05L	L.0005 04L	L.0005 02L
83-02-28	1030	1	--	--	--	--	--	.19 05L	L.0005 04R	L.0005 02R
83-04-05	1045	1	.03	--	46.0	.53	46.5	.16 05L	.0005 04L	L.0005 02L
83-04-30	0830	1	.01	--	17.0	.75	17.8	.14 05L	L.0005 04L	L.0005 02L
83-05-30	0930	1	L.01	--	19.0	44	19.4	.15 05L	L.0005 04L	L.0005 02L
83-06-27	1000	1	.01	--	25.0	57	25.6	.23 05L	.0005 04L	L.0005 02L
83-08-15	0905	1	L.01	--	27.0	.45	27.5	.21 05L	.0010 08L	L.0001 08L
83-09-26	1145	1	L.01	--	26.0	.20	26.2	--	.0013 08L	L.0001 08L
83-10-19	1439	1	.02	--	23.0	.60	23.6	--	.0007 08L	.0001 08L
83-11-16	0932	1	.03	--	23.0	61	23.6	--	--	--
83-12-07	0830	1	.05	--	26.0	31	26.3	.23 05L	--	--

DATE	TIME/	SUB-ID/	13302P ALUMINUM EXTRBLE. AL	47301P SILVER EXTRBLE. AG	25304P MANGANESE EXTRBLE. MN	25104G MANGANESE DISSOLVED MN	26304P IRON EXTRBLE FE	26104G IRON DISSOLVED FE	80011P MERCURY TOTAL HG	23020P VANADIUM TOTAL RECOVERABLE VA
YMD/AMJ	HEURE	SOUS-ID	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L	MG/L
83-01-20	1000	1	--	--	.39	--	.32	--	--	L.001
83-02-28	1030	1	--	--	.93 04W	--	.55 04W	--	--	L.001 20W
83-04-05	1045	1	--	--	1.20	--	.53	--	--	L.001
83-04-30	0830	1	--	--	.01	--	.19	--	--	L.001
83-06-27	1000	1	--	--	.05	--	.25	--	--	L.001
83-08-15	0905	1	--	--	--	--	--	--	--	.001 02P
83-09-26	1145	1	--	--	--	--	--	--	--	.001 02P
83-10-19	1439	1	--	--	--	--	--	--	--	L.001 02P
83-11-16	0932	1	--	--	--	--	--	--	--	.001 02P
83-12-07	0830	1	--	--	--	--	--	--	--	L.001 02P

DATE	TIME/	SUB-ID/	24302P CHROMIUM EXTRBLE. CR	27020P COBALT TOTAL RECOVERABLE CO	28020P NICKEL TOTAL RECOVERABLE NI	29020P COPPER TOTAL RECOVERABLE CU	30020P ZINC TOTAL RECOVERABLE ZN	48020P CADMIUM TOTAL RECOVERABLE CD	56020P BARIUM TOTAL RECOVERABLE BA	82020P LEAD TOTAL RECOVERABLE PB
YMD/AMJ	HEURE	SOUS-ID	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
83-01-20	1000	1	--	L.002	L.002	L.001	.009	L.001	L.05	L.004
83-02-28	1030	1	--	L.002 20W	L.002 20W	.002 20W	--	L.001 20W	.05 20W	L.004 20W
83-04-05	1045	1	--	L.002	L.002	.001	--	L.001	L.05	L.004
83-04-30	0830	1	--	L.002	.002	L.001	.007	L.001	L.05	L.004
83-06-27	1000	1	--	L.002	.002	.006	.003	L.001	L.05	L.004
83-08-15	0905	1	--	L.001 02P	.002 02P	.011 05P	.006 05P	L.001 02P	L.10 01P	.001 02P
83-09-26	1145	1	--	L.001 02P	L.001 02P	.010 05P	.003 05P	L.001 02P	L.10 01P	L.001 02P
83-10-19	1439	1	--	L.001 02P	L.001 02P	.001 05P	L.001 05P	L.001 02P	L.10 01P	.001 02P
83-11-16	0932	1	--	L.001 02P	L.001 02P	L.001 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P
83-12-07	0830	1	--	L.001 02P	.001 02P	L.001 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P

DETAILED WATER QUALITY 1983
MANITOBA

STATION - 00MA05LD0001
OVERFLOWING RIVER AT HWY 10 MANITOBA LAT. 53D 9M 15S LONG. 101D 8M 29S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-20	1000	1	.006	L.001	.004	L.001	L.001	L.002	L.001	L.001
83-02-28	1030	1	--	L.001 11R	.004 75R	L.001 70R	L.001	L.002 10R	L.001 20R	L.001 05R
83-04-05	1045	1	.007	L.001	.002	.001	L.001	L.002	L.001	L.001
83-04-30	0830	1	.012	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-05-30	0930	1	.006	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-06-27	1000	1	.013	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-08-15	0905	1	.009	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-09-26	1145	1	006	L.001	.001	.001	L.001	L.002	L.001	L.001
83-10-19	1439	1	.005	L.001	.007	L.001	L.001	L.002	L.001	L.001
83-11-16	0932	1	.006	L.001	.005	L.001	L.001	L.002	L.001	L.001
83-12-07	0830	1	--	L.001	.004	L.001	L.001	L.002	L.001	L.001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L MEDD (DIELDRIN) UG/L
83-01-20	1000	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-02-28	1030	1	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R
83-04-05	1045	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-30	0830	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-30	0930	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-27	1000	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-15	0905	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-26	1145	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-19	1439	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-11-16	0932	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-12-07	0830	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-20	1000	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-02-28	1030	1	L.001 25R	L.003 60R	L.002 65R	L.2 20W	L.004 00W	L.009 50W	L.004 55W	L.002 10W
83-04-05	1045	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-04-30	0830	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-30	0930	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-06-27	1000	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-15	0905	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-09-26	1145	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-10-19	1439	1	L.001	L.003	L.002	L.2	.022	L.009	L.004	L.002
83-11-16	0932	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-12-07	0830	1	L.001	L.003	L.002	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-20	1000	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-02-28	1030	1	L.004 40W	L.2 01W	--	--	--	--	--	--
83-04-05	1045	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-30	0830	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-30	0930	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-27	1000	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-15	0905	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-09-26	1145	1	L.004	L.2	--	--	--	L.002	--	--
83-10-19	1439	1	L.004	L.2	--	--	--	L.002	--	--
83-11-16	0932	1	L.004	L.2	--	--	--	L.002	--	--
83-12-07	0830	1	--	--	--	--	--	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00MA05LE0002
SWAN RIVER AT HWY 10, MANITOBA

LAT. 52D 7M 30S LONG. 101D 15M 5S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-20	1635	1	.5	22.1	--	730.	--	7.4	--	3.6
83-02-28	1805	1	.5	15.0	--	726.	7.2	7.5	--	2.1
83-04-05	1515	1	.5	20.0	750.	743.	7.5	7.6	--	5.8
83-04-30	1410	1	5.5	21.0	290.	302.	7.8	7.7	--	73.0
83-05-30	1445	1	15.5	22.6	395.	437.	8.2	8.1	--	31.0
83-06-27	1430	1	20.5	21.5	380.	431.	7.8	8.5	--	9.0
83-08-15	1400	1	25.0	23.0	475.	530.	8.2	8.3	--	5.7
83-09-26	1445	1	14.0	18.8	510.	546.	8.6	8.3	--	4.1
83-10-19	1749	1	3.0	15.3	500.	487.	8.5	8.3	9.2	5.1
83-11-16	1310	1	1.0	14.7	538	526.	8.4	8.2	9.8	6.7
83-12-07	1110	1	.2	10.4	630.	643	7.6	7.8	9.0	5.7

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-20	1635	1	30.	2.	--	--	--	--	--	8.6
83-02-28	1805	1	30.	L1.	--	--	--	--	--	10.0
83-04-05	1515	1	30.	5.	--	--	--	--	--	11.9
83-04-30	1410	1	80.	--	--	--	--	--	--	13.0
83-05-30	1445	1	50.	56.	--	--	--	--	--	11.4
83-06-27	1430	1	60.	14.	--	--	--	--	--	14.4
83-08-15	1400	1	60.	6.	--	--	--	--	--	10.6
83-09-26	1445	1	40.	6.	--	--	--	--	--	12.4
83-10-19	1749	1	40	5	--	--	--	--	--	13.8
83-11-16	1310	1	50	2.	--	--	--	--	--	13.4
83-12-07	1110	1	--	7.	--	--	--	--	--	11.8

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-20	1635	1	0.	.0	406.	333.0	100.0	34.7	392.6	18.0
83-02-28	1805	1	0.	.0	414.	340.0	104.0	35.5	405.8	19.0
83-04-05	1515	1	0.	0	390.	320.0	100.0	35.2	394.6	24.0
83-04-30	1410	1	0.	.0	119.	98.0	37.7	12.0	143.5	5.4
83-05-30	1445	1	0.	.0	195.	160.0	55.2	19.0	216.1	9.0
83-06-27	1430	1	1.	1.1	223.	185.0	55.4	18.6	214.9	8.7
83-08-15	1400	1	0.	.0	286.	235.0	72.2	24.3	280.3	11.0
83-09-26	1445	1	0.	.0	317.	260.0	74.8	26.5	295.9	13.0
83-10-19	1749	1	0.	.0	243.	199.0 06L	64.0	21.8	249.6	10.0
83-11-16	1310	1	0.	.0	272.	223.0 06L	72.7	24.4	282.0	11.9
83-12-07	1110	1	0.	.0	307.	252.0 06L	89.2	29.7	345.0	15.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-20	1635	1	4.8	4.3	.15	82.	22.0	466.	--	--
83-02-28	1805	1	4.8	4.5	.19	86.	22.0	480.	--	--
83-04-05	1515	1	5.8	12.0	.13	98.	22.0	489.	--	--
83-04-30	1410	1	7.0	2.8	L.05	48.	9.6	181.	--	--
83-05-30	1445	1	4.7	2.6	.13	58.	7.6	252.	--	--
83-06-27	1430	1	3.3	2.1	.11	38.	9.4	247.	--	--
83-08-15	1400	1	3.9	3.6	.17	50.	15.0	321.	--	--
83-09-26	1445	1	4.1	3.1	.07	54.	13.0	345.	--	--
83-10-19	1749	1	3.1	2.3	--	51.	9.6 02L	281.	--	--
83-11-16	1310	1	3.2	2.6	.13	55.	9.3 02L	313.	--	--
	1310	1	--	--	.13 08L	--	--	--	--	--
83-12-07	1110	1	4.4	3.6	.16	78.	14.0 02L	386.	--	--
	1110	1	--	--	.16 08L	--	--	--	--	--

DETAILED WATER QUALITY 1983
MANITOBA

STATION - 00MA05LE0002
SWAN RIVER AT HWY 10, MANITOBA

LAT. 520 7M 30S LONG. 1010 15M 55

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15258D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-20	1635	1	.029	.010 03L	.019	--	--	.75	.07	.82
83-04-05	1515	1	.035	.005 03L	.030	--	--	.88	.12	1.00
83-04-30	1410	1	.270	.075 03L	.195	--	--	1.80	.63	2.23
83-05-30	1445	1	.094	.026 03L	.068	--	--	.60	.15	.75
83-06-27	1430	1	.048	.019 03L	.029	--	--	.56	.08	.64
83-08-15	1400	1	.041	.025 03L	.016	--	--	.62	.05	.67
83-09-26	1445	1	.029	.013 03L	.016	--	--	.55	.05	.60
83-10-19	1749	1	.025	.013 03L	.012	--	--	.39	.04	.43
83-11-16	1310	1	.024	.014 03L	.010	--	--	.38	.06	.44
83-12-07	1110	1	.025	.010 03L	.015	--	--	.39	.03	.42

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-20	1635	1	.32	--	13.0	.62	13.6	.13 05L	.0005 04L	L.0005 02L
83-02-28	1805	1	--	--	--	--	--	.12 05L	L.0005 04L	L.0005 02L
83-04-05	1515	1	.53	--	11.0	.77	11.8	.15 05L	.0005 04L	L.0005 02L
83-04-30	1410	1	1.10	--	13.0	5.70	18.7	.17 05L	.0014 04L	.0005 02L
83-05-30	1445	1	.02	--	15.0	.77	15.8	.14 05L	.0015 04L	L.0005 02L
83-06-27	1430	1	L.01	--	17.0	.61	17.6	.16 05L	.0020 04L	L.0005 02L
83-08-15	1400	1	L.01	--	19.0	.42	19.4	.16 05L	.0038 08L	.0003 08L
83-09-26	1445	1	L.01	--	14.0	.33	14.3	--	.0031 08L	.0002 08L
83-10-19	1749	1	L.01	--	13.0	.31	13.3	--	.0024 08L	.0003 08L
83-11-16	1310	1	L.01	--	12.0	.35	12.4	--	--	--
83-12-07	1110	1	L.01	--	18.0	.28	18.3	.18 05L	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00MA05LE0003
MOODY RIVER AT HWY 10, MANITOBA

LAT. 52D 12M 29S LONG. 101D 15M 55

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-20	1800	1	.5	21.9	--	472.	--	7.6	--	5.2
83-02-28	1730	1	.5	16.0	450.	468.	7.3	7.5	--	2.1
83-04-05	1435	1	.5	20.7	450.	445.	7.3	7.6	--	5.3
83-04-30	1330	1	4.5	20.8	255.	262.	7.8	7.8	--	58.0
83-05-30	1350	1	14.5	22.4	290.	323.	7.8	8.1	--	8.4
83-06-27	1400	1	20.0	21.2	290.	324.	8.0	8.3	--	3.8
83-08-15	1330	1	21.5	23.1	300.	330	8.1	8.2	--	9.4
83-09-26	1420	1	13.5	19.4	305.	268.	8.4	8.0	--	6.3
83-10-19	1855	1	4.0	15.1	339.	339.	8.0	8.1	7.6	2.8
83-11-16	1215	1	1.0	14.6	402.	380.	8.2	8.1	6.2	3.9
83-12-07	1030	1	.2	6.9	400.	417.	7.6	7.7	4.5	3.5

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-20	1800	1	30	4.	--	--	--	--	--	11.0
83-02-28	1730	1	40.	4.	--	--	--	--	--	11.5
83-04-05	1435	1	30.	3.	--	--	--	--	--	13.0
83-04-30	1330	1	70.	147.	--	--	--	--	--	13.3
83-05-30	1350	1	50.	22.	--	--	--	--	--	11.6
83-06-27	1400	1	60.	5.	--	--	--	--	--	14.5
83-08-15	1330	1	60.	10.	--	--	--	--	--	9.7
83-09-26	1420	1	50.	10	--	--	--	--	--	12.1
83-10-19	1855	1	30.	3.	--	--	--	--	--	13.5
83-11-16	1215	1	40.	L1.	--	--	--	--	--	13.4
83-12-07	1030	1	50	4.	--	--	--	--	--	11.9

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-20	1800	1	0.	.0	266.	218.0	64.2	22.5	252.9	9.5
83-02-28	1730	1	0.	.0	256.	210.0	62.5	21.5	244.6	10.0
83-04-05	1435	1	0.	.0	250.	205.0	62.0	21.6	243.7	10.0
83-04-30	1330	1	0.	.0	146.	120.0	35.1	12.7	139.9	3.1
83-05-30	1350	1	0.	.0	171.	140.0	42.1	14.7	165.6	3.9
83-06-27	1400	1	0	.0	189.	155.0	42.0	14.8	165.8	3.7
83-08-15	1330	1	0.	.0	189.	155.0	44.6	15.8	176.4	4.1
83-09-26	1420	1	0.	.0	165.	135.0	37.8	12.1	144.2	2.3
83-10-19	1855	1	0.	.0	201.	165.0 06L	49.1	15.2	185.2	3.9
83-11-16	1215	1	0.	.0	241.	198.0 06L	52.2	18.2	205.3	5.3
83-12-07	1030	1	0.	.0	217.	178.0 06L	57.7	19.8	225.6	6.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206I CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-20	1800	1	2.7	2.4	.11	40.	13.0	285.	--	--
83-02-28	1730	1	2.8	2.1	.12	38.	12.0	275.	--	--
83-04-05	1435	1	2.9	2.3	.13	42.	12.0	276.	--	--
83-04-30	1330	1	3.7	1.7	L.05	19.	8.6	156.	--	--
83-05-30	1350	1	2.5	1.4	.10	20.	5.7	174.	--	--
83-06-27	1400	1	2.1	1.1	.09	15.	3.0	176.	--	--
83-08-15	1330	1	2.1	1.4	.12	20.	6.6	188.	--	--
83-09-26	1420	1	1.3	.9	L.05	12.	9.0	156.	--	--
83-10-19	1855	1	1.6	1.3	.11 08L	26.	7.5 02L	203.	--	--
83-11-16	1215	1	2.0	1.5	.11	26.	7.9 02L	232.	--	--
	1215	1	--	--	.11 08L	--	--	--	--	--
83-12-07	1030	1	2.2	1.8	.12	29.	9.1 02L	232.	--	--
	1030	1	--	--	.12 08L	--	--	--	--	--

DETAILED WATER QUALITY 1983
MANITOBA

STATION - 00MA05LE0003
WOODY RIVER AT HWY 10, MANITOBA

LAT. 52D 12M 29S LONG. 101D 15M 55

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-20	1600	1	.018	.005 03L	.013	--	--	64	.05	.69
83-04-05	1435	1	.036	.005 03L	.031	--	--	.81	.12	.93
83-04-30	1330	1	.170	.038 03L	.132	--	--	.89	.58	1.47
83-05-30	1350	1	.033	.010 03L	.023	--	--	.44	.07	.51
83-06-27	1400	1	.025	.010 03L	.015	--	--	.46	.05	.51
83-08-15	1330	1	.023	.007 03L	.016	--	--	.39	.08	.47
83-09-26	1420	1	.027	.006 03L	.021	--	--	.47	.08	.55
83-10-19	1655	1	.012	.004 03L	.008	--	--	.39	.05	.44
83-11-16	1215	1	.014	.010 03L	.004	--	--	.44	.05	.49
83-12-07	1030	1	.009	.007 03L	.002	--	--	.40	.02	.42

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-20	1600	1	.20	--	14.0	.46	14.5	.13 05L	.0005 04L	L.0005 02L
83-02-28	1730	1	--	--	--	--	--	.10 05L	L.0005 04L	L.0005 02L
83-04-05	1435	1	.33	--	14.0	.78	14.8	.15 05L	L.0005 04L	L.0005 02L
83-04-30	1330	1	.36	--	14.0	7.80	21.8	.15 05L	.0007 04L	L.0005 02L
83-05-30	1350	1	L.01	--	13.0	.73	13.7	.10 05L	L.0005 04L	L.0005 02L
83-06-27	1400	1	L.01	--	14.0	.35	14.4	.12 05L	.0011 04L	L.0005 02L
83-08-15	1330	1	L.01	--	14.0	.60	14.6	.12 05L	.0031 08L	L.0002 08L
83-09-26	1420	1	L.01	--	13.0	.65	13.7	--	.0017 08L	L.0001 08L
83-10-19	1655	1	.01	--	12.0	.40	12.4	--	.0014 08L	.0002 08L
83-11-16	1215	1	L.01	--	13.0	.33	13.3	--	--	--
83-12-07	1030	1	.03	--	16.0	.25	16.3	.13 05L	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00MA05NF0001
SOURIS RIVER AT COULTER, MANITOBA

LAT. 49D 5M 27S LONG. 100D 58M 51S

DATE	TIME/	SUB-ID/	02061F TEMP. WATER	02061L TEMP. WATER	02041F SPECIFIC CONDUCT.	02041L SPECIFIC CONDUCT.	10301F PH	10301L PH	02073F TURBIDITY	02073L TURBIDITY
YMD/AMJ	HEURE	SOUS-ID	DEG. C	DEG. C	USIE/CM	USIE/CM	PH UNITS	PH UNITS	JTU	JTU
83-01-21	0820	140	0	21.8	--	1690.	7.6	7.3	4.0	3.1
83-02-22	1730	140	0	18.1	1944	1870	7.6	7.4	8.2	4.8
83-03-21	1730	140	.5	21.4	657.	643	7.4	7.2	21.0	12.0
83-04-28	1550	140	6.5	18.2	480.	505.	7.9	7.8	7.0	4.6
83-05-30	1930	140	13.0	22.8	768.	834	8.3	8.3	24.0	18.0
83-06-20	1855	140	21.0	22.2	820	877	8.3	8.6	4.0	2.9
83-07-18	1645	140	25.0	21.7	805	864	8.6	9.0	11.0	7.0
83-08-22	1400	140	19.5	20.9	867	905	8.5	8.5	13.0	10.0
83-09-20	1205	140	7.0	19.5	890	937	8.5	8.5	18.0	25.0
83-10-18	1215	140	4.5	19.8	1136	1207	8.2	8.0	92.0	82.0
83-11-15	1400	140	2.0	12.9	935	1000	8.3	8.2	21.0	28.0
83-12-13	0900	140	0	13.8	1420.	1510	7.9	7.6	13.0	16.0

DATE	TIME/	SUB-ID/	02021L COLOUR TRUE	10401L RESIDUE NONFILTR.	10501L RESIDUE FIXED NONFILTR.	06717G CHLORO-PHYLL A	36002F COLIFORMS TOTAL MF	36012F COLIFORMS FECAL MF	36103F FECAL STREP. MF	08101W OXYGEN DISSOLVED 00 02
YMD/AMJ	HEURE	SOUS-ID	REL. UNITS	MG/L	MG/L	MG/L	NO/DL	NO/DL	NO/DL	MG/L
83-01-21	0820	140	70	4. 01R	--	070 17T	4. 02U	2. 12U	--	6.5
83-02-22	1730	140	70	8.	--	.070	2	2.	--	8.4
83-03-21	1730	140	120	10.	--	020	4	L2	--	5.7
83-04-28	1550	140	60	7.	--	020	4	L2.	--	10.3
83-05-30	1930	140	50	34	--	008	4	L2	--	8.8
83-06-20	1855	140	50	4.	--	006	40	40	--	9.7
83-07-18	1645	140	60	9.	--	050	4	4	--	10.0
83-08-22	1400	140	70	11.	--	030	--	94	--	7.6
83-09-20	1205	140	60.	31.	--	.020	--	46	--	10.1
83-10-18	1215	140	50	143	--	090	--	42.	--	9.2
83-11-15	1400	140	30	1.	--	.010	--	13.	--	13.0
83-12-13	0900	140	--	22.	--	011	12.	4.	--	10.5

DATE	TIME/	SUB-ID/	06301L CARBONATE (CALCD.)	10151L ALKALINITY PHENOL PHTHALEIN	06201L BICARBONT. (CALCD.)	10101L ALKALINITY TOTAL	20103L CALCIUM DISSOLVED	12102L MAGNESIUM DISSOLVED	10602L HARDNESS TOTAL (CALCD.)	11103L SODIUM DISSOLVED
YMD/AMJ	HEURE	SOUS-ID	CO3 MG/L	CACO3 MG/L	HCO3 MG/L	CACO3 MG/L	CA MG/L	MG MG/L	CACO3 MG/L	NA MG/L
83-01-21	0820	140	0.	.0	695.	570.0	114.0	75.0	593.4	200.0
83-02-22	1730	140	0	.0	805	660.0	130.0	84.0	670.4	230.0
83-03-21	1730	140	0	.0	262.	215.0	45.0	25.2	216.1	55.0
83-04-28	1550	140	0	.0	207.	170.0	35.0	18.4	163.1	44.0
83-05-30	1930	140	0	.0	323	265.0	53.0	31.0	260.0	85.0
83-06-20	1855	140	11	8.9	332	290.0	56.1	32.5	273.9	92.0
83-07-18	1645	140	31.	26.0	296.	295.0	52.1	33.1	266.4	100.0
83-08-22	1400	140	9.	7.3	384.	330.0	52.8	36.0	279.6	107.0
83-09-20	1205	140	9	7.5	414.	355.0	50.4	38.3	283.5	112.0
83-10-18	1215	140	0.	.0	524	430.0 06L	73.8	49.6	388.5	118.0
83-11-15	1400	140	0	.0	374.	307.0 06L	46.4	38.8	275.6	99.4
83-12-13	0900	140	0.	.0	395.	324.0 06L	47.2	56.9	352.1	172.0

DATE	TIME/	SUB-ID/	19103L POTASSIUM DISSOLVED	17206L CHLORIDE DISSOLVED	09105L FLUORIDE DISSOLVED	16306L SULPHATE DISSOLVED	14105L SILICA REACTIVE	00201L TOTAL DISSOLVED SOLIDS (CALCD.)	16104P SULFIDE DISSOLVED	06604P CYANIDE TOTAL
YMD/AMJ	HEURE	SOUS-ID	K MG/L	CL MG/L	F MG/L	SO4 MG/L	SIO2 MG/L	MG/L	S MG/L	CN MG/L
83-01-21	0820	140	19.0	50.0	.23	370.	15.0	1186.	--	.004
83-02-22	1730	140	20.0	60.0	.27	390.	20.0	1330.	--	.004
83-03-21	1730	140	17.0	17.0	.09	110.	15.0	413.	--	.005
83-04-28	1550	140	12.0	9.8	.10	76.	8.0	305.	--	.004
83-05-30	1930	140	12.0	18.0	.21	144.	4.1	506.	--	.006
83-06-20	1855	140	12.0	17.0	.21	160.	4.0	548.	--	.008
83-07-18	1645	140	12.0	17.0	.19	150.	9.4	551.	--	.005
83-08-22	1400	140	13.0	20.0	.22	136.	9.6	572.	--	.017
83-09-20	1205	140	10.0	21.0	.23	145.	19.0	609.	--	.013
83-10-18	1215	140	15.0	28.0	.32	204.	14.0 02L	780.	--	.015
	1215	140	--	--	.32 08L	--	--	--	--	--
83-11-15	1400	140	9.5	22.4	--	186.	.1 02L	587.	--	.004
83-12-13	0900	140	14.8	40.7	.34	320.	9.0 02L	855.	--	.005
	0900	140	--	--	.34 08L	--	--	--	--	--

STATION - 00MA05NF0001
SOURIS RIVER AT COULTER, MANITOBA

LAT. 49D 5M 27S LONG. 100D 56M 51S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	15405L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-21 0820 140	280 08R	.210 03V	070 01R	--	.94 51V	.95	.23 02R	1.18
83-02-22 1730 140	460	350	.110	--	.79	.81	46	1.27
83-03-21 1730 140	320	220	100	--	.98	.98	46	1.44
83-04-28 1550 140	.140	092	.048	--	.58	.67	.15	.82
83-05-30 1930 140	.290	180	110	--	.78	.80	.35	1.15
83-06-20 1655 140	350	.340	010	--	.82	.81	.05	.86
83-07-18 1645 140	.380	340	040	--	.94	.95	.40	1.35
83-08-22 1400 140	.390	.340	050	--	.93	.94	.24	1.18
83-09-20 1205 140	170	078	.092	--	1.40	1.40	04	1.44
83-10-18 1215 140	350	047	303	--	2.10	3.30	1.80	5.10
83-11-15 1400 140	.180	058	122	--	.70	.68	49	1.17
83-12-13 0900 140	350	.230	120	--	.86	.90	.15	1.05

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-21 0820 140	L.01 10R	L.1 08W	23.0 04R	1.40 02R	24.4	.55 05V	0022 04V	L.0005 02V
83-02-22 1730 140	L.01	L.1	23.0	2.20	25.2	.44	.0021	L.0005
83-03-21 1730 140	.05	L.1	17.0	2.20	19.2	.37	.0019	L.0005
83-04-28 1550 140	L.01	L.1	13.0	.94	13.9	.24	.0021	L.0005
83-05-30 1930 140	L.01	L.1	13.0	2.80	15.8	.29	.0030	L.0005
83-06-20 1655 140	L.01	L.1	14.0	.35	14.4	.33	.0038	L.0005
83-07-18 1645 140	.01	L.1	15.0	1.80	16.8	.39	.0054 08D	L.0005 08D
83-08-22 1400 140	.02	L.1	18.0	1.20	19.2	.44	.0044 08D	.0001 08D
83-09-20 1205 140	14	.3	17.0	.38	17.4	.35	.0049 08D	.0002 08D
83-10-18 1215 140	19	1.7	16.0	11.00	27.0	.34	.0054 08D	.0002 08D
83-11-15 1400 140	.07	3	9.7	3.10	12.8	.30	.0018 08D	.0002 08D
83-12-13 0900 140	.14	.2	17.0	1.10	18.1	.28	.0044 08D	.0003 08D
0900 140	--	--	--	--	--	--	.0044 08L	.0003 08L

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-21 0820 140	--	--	--	.83 04T	--	.07 04T	.02 11W	L.001 20W
83-02-22 1730 140	--	--	--	1.70	--	.12	02	L.001
83-03-21 1730 140	--	--	--	.52	--	.10	10	.003
83-04-28 1550 140	--	--	--	L.01	--	.05	L.02	.001
83-05-30 1930 140	--	--	--	.04	--	.05	L.02	.003
83-06-20 1655 140	--	--	--	03	--	.07	L.02	.001
83-07-18 1645 140	--	--	--	.01	--	.12	L.02	.005
83-08-22 1400 140	--	--	--	L.02	--	.06	L.02	.002 02P
83-09-20 1205 140	--	--	--	L.01	--	L.04	L.02	.009 02P
83-10-18 1215 140	--	--	--	.63	--	L.04	L.02	.013 02P
83-11-15 1400 140	--	--	--	.11	--	L.04	L.02	007 02P
83-12-13 0900 140	--	--	--	.13	--	1.04	.02	.002 02P

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-21 0820 140	--	L.002 20W	.003 20W	.002 20W	.005 20W	L.001 20W	--	L.004 20W
83-02-22 1730 140	--	L.002	.003	L.001	.003	L.001	.25	L.004
83-03-21 1730 140	--	L.002	L.002	.004	--	L.001	.06	L.004
83-04-28 1550 140	--	L.002	.003	.001	--	L.001	L.05	L.004
83-05-30 1930 140	--	L.002	L.002	.002	.003	L.001	.08	L.004
83-06-20 1655 140	--	L.002	L.002	.001	.002	L.001	L.05	L.004
83-07-18 1645 140	--	L.002	.003	.003	.004	L.001	.05	L.004
83-08-22 1400 140	--	L.001 02P	.002 02P	.001 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P
83-09-20 1205 140	--	.002 02P	003 02P	.002 05P	.003 05P	L.001 02P	L.10 01P	.002 02P
83-10-18 1215 140	--	.002 02P	.008 02P	.006 05P	.017 05P	L.001 02P	.37 01P	.005 02P
83-11-15 1400 140	--	L.001 02P	.002 02P	.002 05P	.004 05P	L.001 02P	.11 01P	.001 02P
83-12-13 0900 140	--	L.001 02P	.004 02P	.002 05P	.002 05P	L.001 02P	L.10 01P	.001 02P

STATION - 00MA05NF0001
SOURIS RIVER AT COULTER, MANITOBA

LAT. 49D 5M 27S LONG. 100D 58M 51S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-21 0820 140	.007 35W	L.001 11R	.003 75R	L.001 70R	L.001 30R	L.002 10R	L.001 20R	L.001 05R
83-02-22 1730 140	.007	L.001	.004	L.001	L.001	L.002	L.001	L.001
83-03-21 1730 140	.017	L.001	.004	L.001	L.001	L.002	L.001	L.001
83-04-28 1550 140	.008	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-05-30 1930 140	.005	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-06-20 1855 140	.007	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-07-18 1645 140	.009	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-08-22 1400 140	.010	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-09-20 1205 140	.006	L.001	.002	.001	L.001	L.002	L.001	L.001
83-10-18 1215 140	.006	L.001	.012	.001	L.001	L.002	L.001	L.001
83-11-15 1400 140	.004	L.001	.008	.001	L.001	L.002	L.001	L.001
83-12-13 0900 140	--	L.001	.010	.001	L.001	L.002	L.001	L.001

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-21 0820 140	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R
83-02-22 1730 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-21 1730 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-28 1550 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-30 1930 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-20 1855 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-18 1645 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-22 1400 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-20 1205 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-18 1215 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-11-15 1400 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-12-13 0900 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-21 0820 140	L.001 25R	L.003 60R	L.002 65R	L.2 20W	.040 00W	L.009 50W	L.004 55W	L.002 10W
83-02-22 1730 140	L.001	L.003	L.002	L.2	.200	L.009	L.004	L.002
83-03-21 1730 140	L.001	L.003	L.002	L.2	.100	L.009	L.004	L.002
83-04-28 1550 140	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-30 1930 140	L.001	L.003	L.002	L.2	.020	L.009	L.004	L.002
83-06-20 1855 140	L.001	L.003	L.002	L.2	.090	L.009	L.004	L.002
83-07-18 1645 140	L.001	L.003	L.002	L.2	.070	L.009	L.004	L.002
83-08-22 1400 140	L.001	L.003	L.002	L.2	.050	L.009	L.004	L.002
83-09-20 1205 140	L.001	L.003	L.002	L.2	L.004	L.009	L.004	.002
83-10-18 1215 140	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-11-15 1400 140	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-12-13 0900 140	L.001	L.003	L.002	L.2	.022	L.009	L.004	L.002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-21 0820 140	L.004 40W	L.2 01W	L.002 59R	L.002 60R	L.005 62R	L.002 64R	--	--
83-02-22 1730 140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-21 1730 140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-28 1550 140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-30 1930 140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-20 1855 140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-18 1645 140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-22 1400 140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-09-20 1205 140	L.004	L.2	--	--	--	L.002	--	--
83-10-18 1215 140	L.004	L.2	--	--	--	L.002	--	--
83-11-15 1400 140	L.004	L.2	--	--	--	L.002	--	--
83-12-13 0900 140	L.004	L.2	--	--	--	L.002	--	--

DETAILED WATER QUALITY 1983
MANITOBA

STATION - 05MA05NF0001
SOURIS RIVER AT COULTER, MANITOBA

LAT. 49D 5M 27S LONG. 100D 58M 51S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18300P PHORATE UG/L	18310P ETHION UG/L	18320P CARBO-PHENOTHION UG/L	92111P URANIUM DISSOLVED U UG/L	88502P RADIUM RADIATION RA-226 BQ/L	01502P TRITIUM RADIATION H-3 BQ/L	51501P ANTIMONY RADIATION SB-125 BQ/L	55502P CESIUM RADIATION CS-137 BQ/L
83-01-21	1200	7	--	--	--	2.14	.0015	5.99	L.0069	L.0028

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97354L COMPOSITE SAMPLE DESCRIPTIVE CODE	06152L CARBON DISSOLVED INORGANIC C MG/L
83-01-21	1200	7	1.	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00HA05NF0005
GAINSBOROUGH CREEK AT HWY 83, 1.92KM. ABOVE MOUTH, MANITOBA LAT. 49D 9M 29S LONG. 101D 2M 48S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-03-21 1600 3	.5	21.0	471.	508.	7.4	7.3	13.0	2.7

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	08717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-03-21 1600 3	200.	9.	--	.006	12.	4	--	8.3

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-03-21 1600 3	0	.0	274.	225.0	45.5	27.5	226.8	18.0

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	18104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-03-21 1600 3	19.0	13.0	L.05	28.	16.0	300.	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07503L NITROGEN TOTAL (CALCD.) N MG/L
83-03-21 1600 3	.460	.390	.070	--	1.60	1.50	.26	1.86

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-03-21 1600 3	.50	.4	22.0	1.50	23.5	30	.0019	L.0005

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-03-21 1600 3	--	--	--	40	--	19	.02	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
MANITOBA

STATION - 00MA05NG0013 LAT. 49D 44M 17S LONG. 101D 14M 85
PIPESTONE CREEK 0.25 MILE FROM CROMER OFF BRIDGE ON HWY 255, MANITOBA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-03-21	1150	3	.5	21.1	1162.	1140.	7.7	7.5	3.0	2.6
83-05-31	1050	3	13.0	23.4	664.	701.	8.3	8.3	4.5	2.8
83-06-21	0900	3	17.0	22.2	760.	804.	8.0	8.1	1.8	1.6
83-07-19	0915	3	21.0	22.6	794.	845.	7.8	7.9	2.8	3.4
83-09-21	1520	3	8.0	21.5	715.	757.	8.3	8.3	1.7	2.0
83-10-19	1500	3	3.0	20.0	784.	852.	7.9	7.9	2.9	3.0
83-11-15	1105	3	2.5	13.4	810.	818.	7.9	7.7	2.3	2.6
83-12-12	1600	3	.0	10.2	1250.	1500.	7.8	7.7	3.1	4.8

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-03-21	1150	3	20.	2 01R	--	005 17T	4. 02U	L2. 12U	--	10.7
83-05-31	1050	3	40.	1.	--	.008	80	56.	--	9.7
83-06-21	0900	3	40.	1.	--	.005	50	40.	--	6.8
83-07-19	0915	3	50.	7.	--	.020	--	185	--	5.7
83-09-21	1520	3	20.	3.	--	.004	--	14.	--	11.3
83-10-19	1500	3	20.	3.	--	.008	11.	6.	--	11.7
83-11-15	1105	3	20.	L1	--	.010	30.	28.	--	10.7
83-12-12	1600	3	--	31	--	.015	15	5.	--	9.6

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-03-21	1150	3	0.	.0	408.	335.0	98.9	67.0	522.8	60.0
83-05-31	1050	3	0.	.0	256.	210.0	60.3	36.2	299.6	34.0
83-06-21	0900	3	0	.0	299.	245.0	67.9	42.5	344.5	40.0
83-07-19	0915	3	0.	.0	293.	240.0	59.0	45.6	335.1	55.0
83-09-21	1520	3	0.	.0	268.	220.0	55.4	46.9	331.4	40.0
83-10-19	1500	3	0.	.0	293.	240.0 06L	62.1	50.0	360.9	42.0
83-11-15	1105	3	0.	.0	243.	199.0 06L	51.7	47.3	323.8	45.3
83-12-12	1600	3	0.	.0	279.	229.0 06L	43.2	77.6	427.3	107.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-03-21	1150	3	12.0	22.0	L.05	280.	16.0	757.	--	.005
83-05-31	1050	3	9.4	8.9	.16	146.	9.0	430.	--	.004
83-06-21	0900	3	10.0	11.0	.15	170.	7.2	496.	--	.006
83-07-19	0915	3	11.0	17.0	.15	178.	16.0	526.	--	.004
83-09-21	1520	3	12.0	11.0	.17	174.	4.2	476.	--	.006
83-10-19	1500	3	12.0	13.0	.17	198.	3.5 02L	525.	--	.004
	1500	3	--	--	.17 08L	--	--	--	--	--
83-11-15	1105	3	11.7	14.5	--	198.	2.3 02L	490.	--	.003
83-12-12	1600	3	15.6	53.3	.18	328	19.3 02L	781.	--	.004
	1500	3	--	--	.18 08L	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-03-21	1150	3	.044 06R	.042 03V	.002 01R	--	1.10 51V	1.10 51R	.06 02R	1.16
83-05-31	1050	3	.062	.040	.022	--	.57	.57	.12	.69
83-06-21	0900	3	.062	.045	.017	--	.56	.58	.03	.61
83-07-19	0915	3	.140	.078	.062	--	.58	.56	.17	.73
83-09-21	1520	3	.042	.025	.017	--	.72	.70	.13	.83
83-10-19	1500	3	.041	.018	.023	--	.10	.11	.16	.27
83-11-15	1105	3	.039	.026	.013	--	.56	.57	.14	.71
83-12-12	1600	3	.085	.041	.044	--	.51	.55	.12	.67

STATION - 00MA05NG0013 LAT. 49D 44M 17S LONG. 101D 14M 85
PIPESTONE CREEK 0.25 MILE FROM CROMER OFF BRIDGE ON HWY 255, MANITOBA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-03-21	1150	3	.51 10R	.3 06W	11.0 04R	33 02R	11.3	24 05V	.0007 04V	L.0005 02V
83-05-31	1050	3	L.01	L.1	9.3	48	9.8	.17	.0034	L.0005
83-06-21	0900	3	L.01	L.1	9.8	.17	10.0	.19	.0040	L.0005
83-07-19	0915	3	.02	L.1	10.0	.89	10.9	.21	.0080 08D	L.0001 08D
83-09-21	1520	3	.01	L.1	9.5	71	10.2	.16	.0029 08D	.0002 08D
83-10-19	1500	3	L.01	L.1	9.0	90	9.9	.17	.0020 08D	.0001 08D
83-11-15	1105	3	L.01	L.1	8.7	79	9.5	.17	.0009 08D	.0002 08D
83-12-12	1600	3	.05	.3	13.0	72	13.7	.26	.0027 08D	.0002 08D
	1500	3	--	--	--	--	--	--	.0027 08L	.0002 08L

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-03-21	1150	3	--	--	--	.06 04T	--	.08 04T	L.02 11W	L.001
83-05-31	1050	3	--	--	--	.04	--	.04	L.02	.002
83-06-21	0900	3	--	--	--	.09	--	L.04	L.02	L.001
83-07-19	0915	3	--	--	--	.16	--	.03	.07	L.001
83-09-21	1520	3	--	--	--	.03	--	.05	L.02	.001 02P
83-10-19	1500	3	--	--	--	.09	--	L.04	L.02	.001 02P
83-11-15	1105	3	--	--	--	.05	--	L.04	L.02	.001 02P
83-12-12	1600	3	--	--	--	.22	--	L.04	L.02	.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-03-21	1150	3	--	L.002 20W	L.002 20W	.001 20W	--	L.001 20W	.07 20W	L.004 20W
83-05-31	1050	3	--	L.002	.003	.001	.001	L.001	.05	L.004
83-06-21	0900	3	--	L.002	L.002	L.001	.001	L.001	.07	L.004
83-07-19	0915	3	--	L.002	.002	L.001	.004	L.001	.06	L.004
83-09-21	1520	3	--	.001 02P	.002 02P	.001 05P	.001 05P	L.001 02P	L.10 01P	.002 02P
83-10-19	1500	3	--	L.001 02P	.002 02P	.001 05P	L.001 05P	L.001 02P	.16 01P	.001 02P
83-11-15	1105	3	--	L.001 02P	.008 02P	L.001 05P	.001 05P	L.001 02P	L.10 01P	.003 02P
83-12-12	1600	3	--	L.001 02P	.004 02P	L.001 05P	.004 05P	L.001 02P	.10 01P	.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-03-21	1150	3	.002 35W	L.001 11R	.002 75R	L.001 70R	L.001 30R	L.002 10R	L.001 20R	L.001 05R
83-05-31	1050	3	.004	L.001	.004	L.001	L.001	L.002	L.001	L.001
83-06-21	0900	3	.006	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-07-19	0915	3	.007	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-09-21	1520	3	.004	--	--	--	--	--	--	--
83-10-19	1500	3	.003	--	--	--	--	--	--	--
83-11-15	1105	3	.003	--	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-03-21	1150	3	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R
83-05-31	1050	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-21	0900	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-19	0915	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DETAILED WATER QUALITY 1983
MANITOBA

STATION - **OOMA05NG0013** LAT. 49D 44M 17S LONG. 101D 14M 8S
PIPESTONE CREEK 0.25 MILE FROM CROMER OFF BRIDGE ON HWY 255, MANITOBA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-03-21	1150	3	L.001 25R	L.003 60R	L.002 85R	L.2 20W	L.004 00W	L.009 50W	L.004 55W	L.002 10W
83-05-31	1050	3	L.001	L.003	L.002	L.2	.010	L.009	L.004	L.002
83-06-21	0900	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-07-19	0915	3	L.001	L.003	L.002	L.2	.030	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-03-21	1150	3	L.004 40W	L.2 01W	L.002 59R	L.002 60R	L.005 62R	L.002 64R	--	--
83-05-31	1050	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-21	0900	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-19	0915	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 05MA050A0003
BADGER CREEK AT CARTWRIGHT, MANITOBA

LAT. 49D 6M 15S LONG 99D 19M 22S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		02061F TEMP. WATER DEG C	02061L TEMP. WATER DEG C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-20 1300	3	0	22.1	--	1230	7.7	7.5	3.8	4.0
83-02-22 1255	3	1.0	16.8	1260	1201	7.7	7.6	11.2	4.6
83-03-22 1500	3	.8	21.1	558	539	7.7	7.4	19.0	4.7

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-20 1300	3	70	5	--	007	8	2	--	6.4
83-02-22 1255	3	60	16	--	010	L2	L2	--	5.0
83-03-22 1500	3	200	22	--	020	2	L2	--	10.2

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-20 1300	3	0	0	574	471.0	113.0	69.0	566.2	70.0
83-02-22 1255	3	0	0	610	500.0	130.0	75.0	633.4	75.0
83-03-22 1500	3	0	0	189	155.0	51.0	25.5	232.3	21.0

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-20 1300	3	22.0	53.0	16	172	34.0	816	--	--
83-02-22 1255	3	20.0	90.0	20	170	330.0	1190	--	--
83-03-22 1500	3	20.0	13.0	.06	110	17.0	351	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-20 1300	3	.260	220	.040	--	.89	.89	08	.97
83-02-22 1255	3	.280	.270	.010	--	2.80	2.80	14	2.94
83-03-22 1500	3	.480	.390	.090	--	2.50	2.50	.53	3.03

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-20 1300	3	.36	.8	28.0	.60	28.6	.23	.0022	L.0005
83-02-22 1255	3	.49	1.0	22.0	1.10	23.1	.12	.0014	L.0005
83-03-22 1500	3	.80	.1	14.0	2.90	16.9	.34	.0022	L.0005

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-20 1300	3	--	--	--	.92	--	.09	.04	--
83-02-22 1255	3	--	--	--	1.30	--	.42	.04	--
83-03-22 1500	3	--	--	--	.19	--	.14	L.02	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
MANITOBA

STATION - 00MA05080001
PEMBINA RIVER AT WINDYGATES, MANITOBA

LAT. 49D 1M 53S LONG. 98D 18M 40S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-20	1010	3	.0	22.3	--	1060.	7.8	7.5	4.2	1.5
83-02-22	0946	3	.0	17.0	880.	1040.	7.7	7.5	4.8	2.3
83-03-22	1345	3	1.0	20.9	657.	649.	7.6	7.4	11.0	8.0
83-04-28	0955	3	7.0	18.0	485.	472.	7.9	7.8	170.0	102.0
83-05-30	0945	3	13.0	23.0	609.	655.	8.2	8.2	32.0	24.0
83-06-20	0945	3	18.0	22.8	710.	754.	8.1	8.2	20.0	7.0
83-07-18	0945	3	21.0	22.0	788.	833.	8.2	8.3	2.0	1.8
83-08-17	1015	3	19.5	22.9	812.	865.	8.3	8.1	1.9	1.0
83-09-14	1000	3	8.5	19.7	824.	863.	8.4	8.2	3.0	3.1
83-10-25	1200	3	4.0	20.5	761.	818.	8.3	8.1	3.0	2.5
83-11-08	0935	3	3.5	18.2	787.	841.	8.3	8.2	2.6	2.0
83-12-12	1950	3	.1	10.1	936.	975.	7.7	7.5	1.9	2.6

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-20	1010	3	10.	8.	--	.002	4.	2.	--	4.9
83-02-22	0946	3	20.	4.	--	.001	4.	L2.	--	5.8
83-03-22	1345	3	80.	9.	--	.006	4.	L2.	--	7.4
83-04-28	0955	3	100.	326.	--	.110	L2.	L2.	--	11.5
83-05-30	0945	3	30.	57. 01P	--	.010 17T	32. 02U	32. 12U	--	8.8
83-06-20	0945	3	30.	40	--	.005	80.	80.	--	8.0
83-07-18	0945	3	30.	4.	--	.003	160.	150.	--	7.4
83-08-17	1015	3	20.	2.	--	.001	--	110.	--	9.1
83-09-14	1000	3	10.	5.	--	.002	--	132.	--	9.0
83-10-25	1200	3	10.	4.	--	.001	--	30.	--	10.1
83-11-08	0935	3	5.	L1.	--	.001	16.	16.	--	11.5
83-12-12	1950	3	--	5.	--	.002	18.	2.	--	8.1

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-20	1010	3	0	.0	423.	347.0	111.0	49.3	480.1	70.0
83-02-22	0946	3	0.	.0	408.	335.0	110.0	47.4	469.8	62.0
83-03-22	1345	3	0.	.0	238.	195.0	55.0	27.8	251.8	42.0
83-04-28	0955	3	0.	.0	177.	145.0	43.6	21.5	197.4	28.0
83-05-30	0945	3	0.	.0	232.	190.0	56.4	29.5	262.3	36.0
83-06-20	0945	3	0.	.0	280	230.0	63.2	35.2	302.7	50.0
83-07-18	0945	3	0.	.0	311.	255.0	69.6	37.5	328.2	55.0
83-08-17	1015	3	0	.0	323.	265.0	77.0	38.8	352.0	60.0
83-09-14	1000	3	0.	.0	329.	270.0	79.8	39.0	359.8	56.0
83-10-25	1200	3	0.	.0	244	200.0 06L	64.0	34.7	302.7	52.4
83-11-08	0935	3	0.	.0	277.	227.0 06L	72.0	36.2	328.8	53.8
83-12-12	1950	3	0.	.0	230.	189.0 06L	63.6	43.7	338.7	62.4

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-20	1010	3	10.2	24.0	.18	228.	22.0	723.	--	.003
83-02-22	0946	3	10.0	23.0	.22	232.	22.0	707.	--	.005
83-03-22	1345	3	13.0	15.0	.09	130.	20.0	420.	--	.011
83-04-28	0955	3	8.8	8.5	.10	95.	14.0	306.	--	.005
83-05-30	0945	3	10.0	8.9	.16	130.	15.0	400.	--	.006
83-06-20	0945	3	11.0	11.0	.21	150.	18.0	477.	--	.010
83-07-18	0945	3	12.0	14.0	.20	164.	32.0	537.	--	.004
83-08-17	1015	3	13.0	16.0	.24	174.	33.0	571.	--	.014
83-09-14	1000	3	11.0	16.0	.25	178.	26.0	568.	--	.007
83-10-25	1200	3	9.1	16.1	--	168.	16.8 02L	481.	--	.003
83-11-08	0935	3	9.2	16.8	--	175.	17.8 02L	517.	--	.003
83-12-12	1950	3	9.8	20.6	.20 08L	229.	20.2 02L	563.	--	.003

STATION - 00MA050B0001
PEMBINA RIVER AT WINDYGATES, MANITOBA

LAT. 49D 1M 53S LONG. 98D 18M 40S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-20	1010	3	.140	.130	.010	--	.56	.58	.04	.62
83-02-22	0946	3	.170	.150	.020	--	.60	.61	.03	.64
83-03-22	1345	3	.480	.430	.050	--	2.10	1.90	.13	2.03
83-04-28	0955	3	.320	.130	.190	--	.77	.77	1.20	1.97
83-05-30	0945	3	.230 06R	.170 03V	.060 01R	--	.83 51V	.91 51R	.15 02R	1.06
83-06-20	0945	3	.280	.230	.050	--	.69	.69	.14	.83
83-07-18	0945	3	.300	.290	.010	--	.52	.51	.01	.52
83-08-17	1015	3	.240	.210	.030	--	.42	.43	.04	.47
83-09-14	1000	3	.540	.220	.320	--	.41	--	--	--
83-10-25	1200	3	.170	.170	.000	--	.44	.45	.05	.50
83-11-08	0935	3	.140	.130	.010	--	.44	.44	.03	.47
83-12-12	1950	3	.150	.120	.030	--	.34	.34	.03	.37

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-20	1010	3	.12	.1	6.7	.34	7.0	.24	.0015	L.0005
83-02-22	0946	3	.27	.1	6.1	.23	6.3	.19	.0016	.0011
83-03-22	1345	3	.75	.8	9.9	.76	10.7	.21	.0020	L.0005
83-04-28	0955	3	L.01	L.1	12.0	7.80	19.8	.15	.0019	L.0005
83-05-30	0945	3	.14 10R	L.1 06W	10.0 04R	1.40 02R	11.4	.18 05V	.0022 04V	L.0005 02V
83-06-20	0945	3	L.01	L.1	10.0	1.00	11.0	.18	.0029	L.0005
83-07-18	0945	3	.01	L.1	9.2	.13	9.3	.19	.0044 08D	.0004 08D
83-08-17	1015	3	L.01	L.1	7.4	.22	7.6	.21	.0037 08D	.0004 08D
83-09-14	1000	3	--	L.1	--	--	--	19	.0032 08D	.0006 08D
83-10-25	1200	3	L.01	L.1	7.5	.31	7.8	19	.0035 08D	.0006 08D
83-11-08	0935	3	L.01	L.1	7.2	.18	7.4	18	.0020 08D	.0004 08D
83-12-12	1950	3	.05	L.1	7.4	.35	7.8	.18	.0028 08D	.0005 08D
	1950	3	--	--	--	--	--	--	.0028 08L	.0005 08L

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-20	1010	3	--	--	--	1.80	--	L.04	.02	L.001
83-02-22	0946	3	--	--	--	1.30	--	L.04	L.02	L.001
83-03-22	1345	3	--	--	--	.34	--	.08	L.02	.003
83-04-28	0955	3	--	--	--	L.01	--	.04	.02	.022
83-05-30	0945	3	--	--	--	.02 04T	--	L.04 04T	L.02 11W	.007 20W
83-06-20	0945	3	--	--	--	.04	--	L.04	L.02	.003
83-07-18	0945	3	--	--	--	L.01	--	.03	.02	L.001
83-08-17	1015	3	--	--	--	.09	--	L.05	L.02	.002 02P
83-09-14	1000	3	--	--	--	.10	--	.07	L.02	.003 02P
83-10-25	1200	3	--	--	--	.09	--	L.04	.03	.002 02P
83-11-08	0935	3	--	--	--	.23	--	L.04	.02	.002 02P
83-12-12	1950	3	--	--	--	.61	--	--	.02	.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-20	1010	3	--	L.002	.008	.001	.002	L.001	.05	L.004
83-02-22	0946	3	--	L.002	.004	.001	.005	L.001	L.05	L.004
83-03-22	1345	3	--	L.002	.003	.004	--	L.001	L.05	.005
83-04-28	0955	3	--	L.002	.018	.011	.022	L.001	.01	.004
83-05-30	0945	3	--	L.002 20W	.005 20W	.003 20W	.005 20W	L.001 20W	.05 20W	L.004 20W
83-06-20	0945	3	--	L.002	.005	.002	.007	L.001	.05	L.004
83-07-18	0945	3	--	L.002	L.002	.002	L.001	L.001	.06	L.004
83-08-17	1015	3	--	L.001 02P	.006 02P	.002 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P
83-09-14	1000	3	--	L.001 02P	.003 02P	.002 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P
83-10-25	1200	3	--	L.001 02P	.007 02P	.006 05P	.007 05P	L.001 02P	.12 01P	L.001 02P
83-11-08	0935	3	--	L.001 02P	.004 02P	.001 05P	.008 05P	L.001 02P	.30 01P	L.001 02P
83-12-12	1950	3	--	L.001 02P	.007 02P	.001 05P	.004 05P	L.001 02P	L.10 01P	.004 02P

DETAILED WATER QUALITY 1983
MANITOBA

STATION - 00MA060B0001
PEMBINA RIVER AT WINDYGATES, MANITOBA

LAT. 49D 1M 53S LONG. 98D 18M 40S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-20	1010	3	.002	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-02-22	0945	3	.006	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-03-22	1345	3	.010	L.001	.005	L.001	L.001	L.002	L.001	L.001
83-04-28	0955	3	.009	L.001	.004	.002	L.001	L.002	L.001	L.001
83-05-30	0945	3	.003 35W	L.001 11R	.004 75R	.003 70R	L.001 30R	L.002 10R	L.001 20R	L.001 05R
83-06-20	0945	3	.005	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-07-18	0945	3	.004	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-08-17	1015	3	.004	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-09-14	1000	3	.002	--	--	--	--	--	--	--
83-10-25	1200	3	.001	--	--	--	--	--	--	--
83-11-08	0935	3	.002	--	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L MEDD (DIELDRIN) UG/L
83-01-20	1010	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-02-22	0945	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-22	1345	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-28	0955	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-30	0945	3	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R
83-06-20	0945	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-18	0945	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-17	1015	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-20	1010	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-02-22	0945	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-22	1345	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-04-28	0955	3	L.001	L.003	L.002	L.2	.100	L.009	L.004	L.002
83-05-30	0945	3	L.001 25R	L.003 60R	L.002 65R	L.2 20W	.020 00W	L.009 50W	L.004 55W	L.002 10W
83-06-20	0945	3	L.001	L.003	L.002	L.2	.040	L.009	L.004	L.002
83-07-18	0945	3	L.001	L.003	L.002	L.2	.050	L.009	L.004	L.002
83-08-17	1015	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-20	1010	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-02-22	0945	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-22	1345	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-28	0955	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-30	0945	3	L.004 40W	L.2 01W	L.002 59R	L.002 60R	L.005 62R	L.002 64R	--	--
83-06-20	0945	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-18	0945	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-17	1015	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00MA050C0001
RED RIVER AT EMERSON, MANITOBA

LAT. 49D 0M 29S LONG. 97D 12M 38S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-11 0945 140	.0	17.3	--	644.	8.1	7.7	6.2	5.9
83-02-02 0945 140	.0	12.0	500.	643.	7.9	7.6	5.0	4.9
83-03-10 1100 140	.2	18.2	467.	505.	7.7	7.5	70.0	44.0
83-04-08 0825 140	1.0	20.2	490.	395.	7.9	7.6	108.0	64.0
83-05-04 0930 140	11.5	23.7	545.	509.	8.3	8.1	140.0	97.0
83-06-07 0858 140	16.0	22.6	690.	746.	8.3	8.3	94.0	66.0
83-07-06 0920 140	18.0	21.6	616.	641.	7.9	8.0	165.0	175.0
83-08-04 1030 140	25.0	25.4	605.	622.	8.0	8.2	40.0	120.0
83-09-01 0855 140	24.5	20.7	382.	393.	7.8	7.8	G200.0	220.0
83-10-05 0827 140	10.0	20.2	612.	640.	8.2	8.3	36.0	33.0
83-11-01 0930 140	7.0	18.4	695.	744.	8.2	8.2	32.0	32.0
83-12-01 1010 140	.1	5.0	702	753.	8.3	8.1	8.8	6.9

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-11 0945 140	10.	9.	--	.003	8.	6.	--	11.5
83-02-02 0945 140	20.	6.	--	.004	103.	10.	--	11.9
83-03-10 1100 140	60.	62.	--	010	4.	L2.	--	9.4
83-04-08 0825 140	120.	122.	--	.003	16.	12.	--	9.9
83-05-04 0930 140	30.	216.	--	.020	40.	L2.	--	10.7
83-06-07 0858 140	30.	118.	--	.007	4.	2.	--	8.8
83-07-06 0920 140	60.	395.	--	.020	12.	10.	--	7.4
83-08-04 1030 140	50.	231.	--	L.001	22	20.	--	6.5
83-09-01 0855 140	100.	616.	--	.010	L2.	L2.	--	6.7
83-10-05 0827 140	40.	52.	--	.008	4.	2.	--	10.0
83-11-01 0930 140	40.	51.	--	.020	3.	L2.	--	10.0
83-12-01 1010 140	20.	8.	--	.020	2.	2.	--	13.4

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-11 0945 140	0.	.0	286.	235.0	67.4	29.3	288.9	37.0
83-02-02 0945 140	0.	.0	293.	240.0	62.4	28.3	272.3	42.0
83-03-10 1100 140	0.	.0	207.	170.0	49.2	22.6	215.9	22.0
83-04-08 0825 140	0.	.0	165.	135.0	40.5	16.5	169.1	18.0
83-05-04 0930 140	0.	.0	238.	195.0	57.1	25.4	247.2	32.0
83-06-07 0858 140	0.	.0	280.	230.0	69.1	33.2	309.2	38.0
83-07-06 0920 140	0.	.0	244.	200.0	62.0	26.6	264.3	31.0
83-08-04 1030 140	0.	.0	260.	213.0	61.1	27.3	265.0	26.0
83-09-01 0855 140	0.	.0	177.	145.0	43.6	17.0	178.9	11.0
83-10-05 0827 140	0.	.0	244.	200.0	65.2	28.9	281.8	31.0
83-11-01 0930 140	0.	.0	274.	225.0 06L	75.1	32.9	323.0	34.8
83-12-01 1010 140	0.	.0	285.	234.0 06L	66.9	31.2	295.5	47.6

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-11 0945 140	5.1	38.0	.14	70.	9.0	397.	--	.005
83-02-02 0945 140	5.0	40.0	.13	60.	9.7	391.	--	.005
83-03-10 1100 140	7.3	24.0	.06	50.	12.0	289.	--	.014
83-04-08 0825 140	6.9	15.0	.11	50.	12.0	240.	--	.010
83-05-04 0930 140	7.0	27.0	.20	80.	9.4	355.	--	.004
83-06-07 0858 140	6.6	38.0	.20	102.	6.0	431.	--	.005
83-07-06 0920 140	7.4	27.0	.21	90.	22.0	386.	--	.015
83-08-04 1030 140	7.1	28.0	.19	71.	22.0	370.	--	.021
83-09-01 0855 140	4.8	13.0	.15	47.	15.0	238.	--	.028
83-10-05 0827 140	5.7	33.0	.18	89.	14.0	387.	--	.009
83-11-01 0930 140	6.5	43.6	.18 08L	105.	7.2 02L	440.	--	.004
83-12-01 1010 140	6.1	57.9	.16 08L	82.	5.1 02L	437.	--	.003

STATION - 05MA060C0001
RED RIVER AT EMERSON, MANITOBA

LAT. 49D 0M 29S LONG. 97D 12M 38S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-11 0945 140	.065	.037	.028	--	.81	.79	.08	.87
83-02-02 0945 140	.089	.081	.008	--	--	.41	.07	.48
83-03-10 1100 140	.350	.230	.120	--	1.90	1.90	.15	2.05
83-04-08 0925 140	.360	.230	.130	--	1.20	1.40	.48	1.88
83-05-04 0930 140	.320	.054	.266	--	.49	.54	.64	1.18
83-06-07 0858 140	.180	.050	.130	--	.56	.60	.28	.88
83-07-05 0920 140	.500	.170	.330	--	.97	.98	.72	1.70
83-08-04 1030 140	.340	.170	.170	--	1.30	1.20	.47	1.67
83-09-01 0855 140	.580	.140	.440	--	1.40	1.40	1.50	2.90
83-10-05 0927 140	.170	.110	.060	--	.84	.90	.20	1.10
83-11-01 0930 140	.150	.085	.065	--	.64	.70	.07	.77
83-12-01 1010 140	.120	.065	.055	--	.53	.57	.13	.70

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-11 0945 140	.22	L.1	12.0	.66	12.7	.16	.0008	L.0005
83-02-02 0945 140	.41	L.1	6.5	1.00	7.5	.10	.0007	L.0005
83-03-10 1100 140	1.50	.2	10.0	3.50	13.5	.11	.0023	L.0005
83-04-08 0925 140	.70	.2	10.0	3.90	13.9	.16	.0037	L.0005
83-05-04 0930 140	L.01	L.1	9.2	4.90	14.1	.14	.0019	L.0005
83-06-07 0858 140	L.01	L.1	11.0	3.70	14.7	.15	.0019	L.0005
83-07-05 0920 140	.42	L.1	11.0	7.10	18.1	.17	.0050	L.0005
83-08-04 1030 140	.52	L.1	11.0	3.90	14.9	.19	.0054 08D	.0005 08D
83-09-01 0855 140	.96	L.1	7.7	14.00	21.7	.24	.0036 08D	.0004 08D
83-10-05 0927 140	.22	L.1	12.0	1.40	13.4	.20	.0039 08D	.0003 08D
83-11-01 0930 140	.10	L.1	--	.43	--	.17	.0033 08D	L.0001 08D
83-12-01 1010 140	.07	L.1	11.0	.80	11.8	.16	.0022 08D	.0002 08D
1010 140	--	--	--	--	--	--	.0022 08L	.0002 08L

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-11 0945 140	--	--	--	.02	--	L.04	.02	L.001
83-02-02 0945 140	--	--	--	.01	--	.05	L.02	.001
83-03-10 1100 140	--	--	--	.05	--	.07	.05	.003
83-04-08 0925 140	--	--	--	.06	--	.04	.02	.013
83-05-04 0930 140	.82	--	--	L.01	--	L.04	.02	.017
83-06-07 0858 140	.55	--	--	L.01	--	.04	.05	.011
83-07-05 0920 140	2.00	--	--	L.01	--	L.04	.03	.038
83-08-04 1030 140	--	--	--	L.01	--	L.04	L.02	.022 02P
83-09-01 0855 140	--	--	--	L.02	--	L.04	.06	.021 02P
83-10-05 0927 140	--	--	--	L.01	--	L.04	L.02	.010 02P
83-11-01 0930 140	--	--	--	L.01	--	L.04	.04	.007 02P
83-12-01 1010 140	.24	--	--	L.02	--	.05	L.02	.002 02P

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-11 0945 140	--	L.002	L.002	L.001	L.001	L.001	.05	L.004
83-02-02 0945 140	--	L.002	L.002	L.001	.003	L.001	.05	L.004
83-03-10 1100 140	--	L.002	.004	.002	--	L.001	L.05	L.004
83-04-08 0925 140	--	.003	L.002	.004	--	L.001	L.05	L.004
83-05-04 0930 140	--	L.002	.018	.009	.021	L.001	.08	.004
83-06-07 0858 140	--	L.002	.008	.008	.014	L.001	L.05	L.004
83-07-05 0920 140	--	.003	.020	.013	.037	L.001	.05	.005
83-08-04 1030 140	--	.002 02P	.013 02P	.009 05P	.020 05P	L.001 02P	.12 01P	L.004 02P
83-09-01 0855 140	--	.009 02P	.026 02P	.021 05P	.069 05P	L.001 02P	.10 01P	.007 02P
83-10-05 0927 140	--	L.001 02P	.004 02P	.004 05P	.003 05P	L.001 02P	L.10 01P	.001 02P
83-11-01 0930 140	--	L.001 02P	.005 02P	.005 05P	.003 05P	.001 02P	.12 01P	.003 02P
83-12-01 1010 140	--	L.001 02P	.003 02P	.003 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P

STATION - 05MA050C0001
RED RIVER AT EMERSON, MANITOBA

LAT. 49D 0M 29S LONG. 97D 12M 38S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-11 0945 140	.003	L.001	.005	.002	L.001	L.002	L.001	L.001
83-02-02 0945 140	.004	--	--	--	--	--	--	--
83-02-09 0910 140	--	L.001	.004	L.001	L.001	L.002	L.001	L.001
83-03-10 1100 140	.008	--	--	--	--	--	--	--
83-04-08 0925 140	.009	L.001	.006	L.001	L.001	L.002	L.001	L.001
83-05-04 0930 140	.005	L.001	.002	.002	L.001	L.002	L.001	L.001
83-06-07 0858 140	.005	L.001	.002	.002	L.001	L.002	L.001	L.001
83-07-05 0920 140	.007	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-08-04 1030 140	004	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-09-01 0855 140	--	L.001	.004	.004	L.001	L.002	L.001	L.001
83-10-05 0927 140	.013	L.001	001	L.001	L.001	L.002	L.001	L.001
83-11-01 0930 140	.004	L.001	008	.002	L.001	L.002	L.001	L.001
83-12-01 1010 140	--	L.001	.094	L.001	L.001	L.002	L.001	L.001

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-11 0945 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-02-09 0910 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-08 0925 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-04 0930 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-07 0858 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-05 0920 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-04 1030 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-01 0855 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-05 0927 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-11-01 0930 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-12-01 1010 140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-11 0945 140	L.001	L.003	L.002	L.2	.020	L.009	L.004	L.002
83-02-09 0910 140	L.001	L.003	L.002	L.2	.050	L.009	L.004	L.002
83-03-10 1100 140	--	--	--	L.2	.090	L.009	L.004	L.002
83-04-08 0925 140	L.001	L.003	L.002	L.2	.080	L.009	L.004	L.002
83-05-04 0930 140	L.001	L.003	L.002	L.2	.030	L.009	L.004	L.002
83-06-07 0858 140	L.001	L.003	L.002	--	--	--	--	--
83-07-05 0920 140	L.001	L.003	L.002	L.2	.100	L.009	L.004	L.002
83-08-04 1030 140	L.001	L.003	L.002	L.2	100	L.009	L.004	L.002
83-09-01 0855 140	L.001	L.003	L.002	L.2	.019	L.009	.031	L.002
83-10-05 0927 140	L.001	L.003	L.002	L.2	.050	L.009	L.004	L.002
83-11-01 0930 140	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-12-01 1010 140	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-11 0945 140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-02-09 0910 140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-10 1100 140	L.004	L.2	--	--	--	--	--	--
83-04-08 0925 140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-04 0930 140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-07 0858 140	--	L.2	L.002	L.002	L.005	L.002	--	--
83-07-05 0920 140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-04 1030 140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-09-01 0855 140	L.004	L.2	--	--	--	L.002	--	--
83-10-05 0927 140	L.004	L.2	--	--	--	L.002	--	--
83-11-01 0930 140	L.004	L.2	--	--	--	L.002	--	--
83-12-01 1010 140	L.004	L.2	--	--	--	L.002	--	--

DETAILED WATER QUALITY 1983
MANITOBA

STATION - 00MA050C0001
RED RIVER AT EMERSON, MANITOBA

LAT. 49D 0M 29S LONG. 97D 12M 38S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18300P PHORATE UG/L	18310P ETHION UG/L	18320P CARBO-PHENOTHION UG/L	92111P URANIUM DISSOLVED U UG/L	88502P RADIUM RADIATION RA-226 BQ/L	01502P TRITIUM RADIATION H-3 BQ/L	51501P ANTIMONY RADIATION SB-125 BQ/L	55502P CESIUM RADIATION CS-137 BQ/L
83-01-11	1200	7	--	--	--	6.90	.0067	6.33	L.0075	.0086

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97354L COMPOSITE SAMPLE DESCRIPTIVE CODE	06152L CARBON DISSOLVED INORGANIC C MG/L
83-01-11	1200	7	1.	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00MA05DD0001
ROSEAU RIVER AT GARDENTON, MANITOBA

LAT. 49D 5M 16S LONG. 96D 41M 15S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-28 1300	3	.0	16.2	--	659.	7.7	7.1	3.4	3.9
83-02-25 1215	3	.0	16.6	657.	654.	7.2	7.1	3.0	1.8
83-03-30 1500	3	.5	21.9	260.	250.	7.2	6.8	3.8	1.6
83-04-21 1220	3	9.0	21.1	264.	259.	7.8	7.6	9.0	2.6
83-05-27 1115	3	14.0	23.0	374.	399.	8.0	8.0	3.0	3.2
83-06-17 0920	3	16.0	19.9	387.	403.	7.9	8.0	14.0	11.0
83-07-13 0930	3	23.0	22.1	394.	403.	7.7	7.9	17.0	8.5
83-08-31 1140	3	24.0	20.4	385.	395.	8.3	8.2	9.8	6.4
83-09-29 1145	3	12.5	21.4	358.	373.	8.2	8.1	12.0	10.0
83-10-26 1155	3	6.0	14.1	415.	413.	8.2	8.1	10.0	7.0
83-11-09 1122	3	3.0	18.6	401.	419.	8.3	8.1	6.5	5.0
83-12-08 1240	3	.0	6.8	437.	455.	7.7	7.5	3.6	3.6

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-28 1300	3	50.	6.	--	.003	14.	6.	--	3.6
83-02-25 1215	3	50.	12.	--	.001	6.	L2.	--	2.2
83-03-30 1500	3	80.	2	--	.006	L2.	L2.	--	5.6
83-04-21 1220	3	60.	4.	--	.006	12.	L2.	--	10.5
83-05-27 1115	3	90	3.	--	.005	68.	6.	--	9.5
83-06-17 0920	3	80.	13.	--	.009	32.	L2.	--	8.9
83-07-13 0930	3	120.	30. 01R	--	.005 17T	24. 02U	10. 12U	--	6.0
83-08-31 1140	3	60.	6.	--	.005	140.	110.	--	6.9
83-09-29 1145	3	60.	7	--	.002	--	10.	--	9.5
83-10-26 1155	3	60.	8.	--	L 001	4.	2.	--	11.0
83-11-09 1122	3	50.	2.	--	.002	4	4.	--	12.4
83-12-08 1240	3	50.	5.	--	.004	2.	L2.	--	9.2

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-28 1300	3	0.	.0	451.	370.0	90.0	38.8	384.5	11.0
83-02-25 1215	3	0.	.0	445.	365.0	86.5	38.0	372.4	10.0
83-03-30 1500	3	0.	.0	134.	110.0	31.4	10.9	123.3	2.6
83-04-21 1220	3	0.	.0	146.	120.0	34.0	12.5	136.4	2.5
83-05-27 1115	3	0.	.0	238.	195.0	53.0	20.1	215.1	4.3
83-06-17 0920	3	0.	.0	244.	200.0	52.7	20.7	216.8	5.3
83-07-13 0930	3	0.	.0	256.	210.0	57.1	20.6	227.4	3.7
83-08-31 1140	3	0	0	250.	205.0	50.0	23.6	222.0	6.3
83-09-29 1145	3	0.	.0	226.	185.0	46.1	19.6	195.8	6.2
83-10-26 1155	3	0	0	244.	200.0 06L	54.9	20.0	219.4	6.9
83-11-09 1122	3	0	.0	241.	198.0 06L	52.6	19.1	210.0	10.7
83-12-08 1240	3	0	.0	274.	225.0 06L	62.5	23.4	252.4	6.4

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-28 1300	3	3.6	4.3	.12	25.	20.0	415.	--	.003
83-02-25 1215	3	3.6	3.9	.17	14.	20.0	395.	--	.004
83-03-30 1500	3	6.8	5.0	L.05	15.	9.0	147.	--	.006
83-04-21 1220	3	4.3	2.9	L.05	10.	8.6	147.	--	.005
83-05-27 1115	3	2.0	2.5	.07	13.	6.6	219.	--	.006
83-06-17 0920	3	1.6	2.0	.11	13.	8.8	224.	--	.009
83-07-13 0930	3	1.4	1.9	.11	12.	20.0	243.	--	.011
83-08-31 1140	3	1.2	2.4	.14	11.	3.7	221.	--	.011
83-09-29 1145	3	2.4	3.0	.09	17.	5.8	211.	--	.005
83-10-26 1155	3	2.4	5.7	--	20.	9.3 02L	239.	--	.003
83-11-09 1122	3	2.0	9.6	--	17.	6.3 02L	235.	--	.003
83-12-08 1240	3	2.0	2.8	--	15.	12.8 02L	260.	--	.003

DETAILED WATER QUALITY 1983
MANITOBA

STATION - 05MA050D0001
ROSEAU RIVER AT GARDENTON, MANITOBA

LAT. 49D 5M 18S LONG. 96D 41M 15S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD) N MG/L
83-01-28 1300	3	.040	.024	.016	--	.77	.75	.06	.81
83-02-25 1215	3	.064	.023	.041	--	.72	.75	.12	.87
83-03-30 1500	3	.160	.130	.030	--	.85	.88	.08	.96
83-04-21 1220	3	.065	.031	.035	--	.62	.65	.12	.77
83-05-27 1115	3	.067	.046	.021	--	.77	.78	.08	.86
83-06-17 0920	3	.078	.050	.028	--	.74	.76	.10	.86
83-07-13 0930	3	.150 05R	.091 03V	.059 01R	--	.90 51V	.92 51R	.14 02R	1.06
83-08-31 1140	3	.150	.085	.065	--	.79	.80	.07	.87
83-09-29 1145	3	.046	.020	.026	--	.70	.72	.09	.81
83-10-26 1155	3	.035	.016	.019	--	.59	.58	.07	.65
83-11-09 1122	3	.031	.023	.008	--	.61	.62	.05	.67
83-12-08 1240	3	.015	.013	.002	--	.48	.44	.03	.47

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-28 1300	3	.05	.2	21.0	.43	21.4	.17	.0005	L.0005
83-02-25 1215	3	L.01	.5	20.0	.72	20.7	.09	.0008	L.0005
83-03-30 1500	3	.18	.2	14.0	.46	14.5	.09	.0007	L.0005
83-04-21 1220	3	L.01	L.1	11.0	.79	11.8	.14	L.0005	L.0005
83-05-27 1115	3	L.01	L.1	20.0	.66	20.7	.13	.0006	L.0005
83-06-17 0920	3	L.01	.1	24.0	.77	24.8	.16	.0013	L.0005
83-07-13 0930	3	.08 10R	L.1 06W	27.0 04R	1.20 02R	28.2	.16 05V	.0019 04V	L.0001 02V
83-08-31 1140	3	.01	L.1	20.0	.47	20.5	.14	.0025 08D	.0002 08D
83-09-29 1145	3	L.01	L.1	16.0	.54	16.5	.11	.0023 08D	.0001 08D
83-10-26 1155	3	L.01	L.1	17.0	.46	17.5	.13	.0011 08D	L.0001 08D
83-11-09 1122	3	L.01	L.1	19.0	.34	19.3	.15	.0014 08D	L.0001 08D
83-12-08 1240	3	.02	L.1	19.0	.35	19.4	.14	.0024 08L	L.0001 08L

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-28 1300	3	--	--	--	.97	--	.22	.02	L.001
83-02-25 1215	3	--	--	--	1.10	--	.44	L.02	L.001
83-03-30 1500	3	--	--	--	.11	--	.12	.02	L.001
83-04-21 1220	3	--	--	--	.01	--	.08	L.02	L.001
83-05-27 1115	3	--	--	--	.01	--	.08	L.02	L.001
83-06-17 0920	3	--	--	--	.01	--	.06	L.02	.001
83-07-13 0930	3	--	--	--	.04 04T	--	.15 04T	.03 11W	.002 20W
83-08-31 1140	3	--	--	--	L.02	--	.05	L.02	.003 02P
83-09-29 1145	3	--	--	--	L.01	--	L.04	L.02	.003 02P
83-10-26 1155	3	--	--	--	L.01	--	.06	L.02	.001 02P
83-11-09 1122	3	--	--	--	L.02	--	.05	.02	.001 02P
83-12-08 1240	3	--	--	--	L.02	--	.09	L.02	.003 02P

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-28 1300	3	--	L.002	L.002	.002	.005	L.001	L.05	L.004
83-02-25 1215	3	--	L.002	L.002	L.001	.004	L.001	.08	L.004
83-03-30 1500	3	--	L.002	L.002	.002	--	.037	L.05	L.004
83-04-21 1220	3	--	L.002	.002	.002	--	L.001	L.05	L.004
83-05-27 1115	3	--	L.002	.003	L.001	.003	L.001	L.05	L.004
83-06-17 0920	3	--	L.002	.004	.001	.002	L.001	L.05	L.004
83-07-13 0930	3	--	L.002 20W	L.002 20W	.001 20W	.005 20W	L.001 20W	.08 20W	L.004 20W
83-08-31 1140	3	--	L.001 02P	.003 02P	.003 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P
83-09-29 1145	3	--	L.001 02P	.005 02P	.007 05P	.002 05P	L.001 02P	L.10 01P	.002 02P
83-10-26 1155	3	--	L.001 02P	.002 02P	.002 05P	L.001 05P	L.001 02P	.14 01P	L.001 02P
83-11-09 1122	3	--	L.001 02P	L.001 02P	L.001 05P	L.001 05P	L.001 02P	.52 01P	L.001 02P
83-12-08 1240	3	--	L.001 02P	.002 02P	L.001 05P	.002 05P	L.001 02P	L.00 01P	.001 02P

STATION - 05MA050D0001
ROSEAU RIVER AT GARDENTON, MANITOBA

LAT. 49D 5M 16S LONG. 96D 41M 15S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-28	1300	3	.004	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-02-25	1215	3	.005	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-03-30	1500	3	.016	L.001	004	L.001	L.001	L.002	L.001	L.001
83-04-21	1220	3	.004	L.001	.004	001	L.001	L.002	L.001	L.001
83-05-27	1115	3	.007	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-06-17	0920	3	.023	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-07-13	0930	3	011 35W	L.001 11R	.003 75R	L.001 70R	L.001 30R	L.002 10R	L.001 20R	L.001 05R
83-08-31	1140	3	--	L.001	003	001	L.001	L.002	L.001	L.001
83-09-29	1145	3	.005	--	--	--	--	--	--	--
83-10-26	1155	3	002	--	--	--	--	--	--	--
83-11-09	1122	3	.005	--	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-28	1300	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-02-25	1215	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-30	1500	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-21	1220	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-27	1115	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-17	0920	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-13	0930	3	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R
83-08-31	1140	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-28	1300	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-02-25	1215	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-30	1500	3	L.001	L.003	L.002	L.2	.090	L.009	L.004	L.002
83-04-21	1220	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-27	1115	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-06-17	0920	3	L.001	L.003	L.002	L.2	050	L.009	L.004	L.002
83-07-13	0930	3	L.001 25R	L.003 60R	L.002 65R	L.2 20W	L.004 00W	L.009 50W	L.004 55W	L.002 10W
83-08-31	1140	3	L.001	L.003	L.002	L.2	.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-28	1300	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-02-25	1215	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-30	1500	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-21	1220	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-27	1115	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-17	0920	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-13	0930	3	L.004 40W	L.2 01W	L.002 59R	L.002 60R	L.005 62R	L.002 64R	--	--
83-08-31	1140	3	L.004	L.2	--	--	--	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
MANITOBA

STATION - 05MA050D0012
PINE CREEK DIVERSION AT HWY 89. MANITOBA LAT. 49D 1M 23S LONG. 95D 58M 40S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-28 1512 3	.0	16.4	--	383.	7.9	7.5	5.5	6.0
83-02-25 1015 3	.2	16.2	378.	372.	7.7	7.5	--	4.0
83-03-30 1300 3	.5	21.6	270.	269.	7.7	7.1	4.2	1.7

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-28 1512 3	20.	11.	--	.001	8.	2.	--	7.2
83-02-25 1015 3	20.	14.	--	.001	6.	L2.	--	9.1
83-03-30 1300 3	60.	1.	--	.002	2.	2.	--	9.4

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-28 1512 3	0.	.0	262.	215.0	55.3	18.6	214.7	4.0
83-02-25 1015 3	0.	.0	250.	205.0	54.0	17.5	206.9	3.7
83-03-30 1300 3	0.	.0	165.	135.0	37.3	12.6	145.0	3.3

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-28 1512 3	1.3	1.0	.09	6.	19.0	234.	--	--
83-02-25 1015 3	1.3	1.0	.11	4.	18.0	223.	--	--
83-03-30 1300 3	2.5	3.2	L.05	7.	11.0	158.	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-28 1512 3	.019	.007	.012	--	.23	.22	.05	.27
83-02-25 1015 3	.031	.007	.024	--	.23	.23	.04	.27
83-03-30 1300 3	.080	.044	.036	--	.58	.53	.08	.61

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-28 1512 3	.11	L.1	3.8	.62	4.4	.07	.0005	L.0005
83-02-25 1015 3	.11	.1	3.3	.62	3.9	.04	.0005	L.0005
83-03-30 1300 3	.05	L.1	10.0	.45	10.5	.36	.0006	L.0005

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-28 1512 3	--	--	--	.08	--	.04	L.02	--
83-02-25 1015 3	--	--	--	.06	--	.07	L.02	--
83-03-30 1300 3	--	--	--	.03	--	.07	L.02	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00MA05PF0022
WINNIPEG RIVER AT POINTE DU BOIS. MANITOBA LAT. 50D 18M 2S LONG. 95D 33M 20S

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-13	1550		3	.0	13.8	75.	110.	8.0	7.5	2.0	3.0
83-02-07	1530		3	.0	14.7	80.	113.	8.2	7.5	2.0	2.6
83-03-14	1514		3	.5	19.3	113.	112.	7.7	7.4	5.0	3.0
83-04-14	1540		3	1.0	23.6	107.	111.	7.6	7.4	4.0	3.5
83-05-11	1527		3	7.5	22.0	104.	113.	7.8	7.7	4.0	3.2
83-06-13	1500		3	16.0	22.5	101.	110.	7.9	7.6	4.0	2.5
83-07-06	1555		3	21.0	13.2	98.	103.	7.6	7.5	1.6	2.4
83-08-09	1540		3	22.5	21.8	105.	117.	7.8	8.3	.6	2.0
83-09-08	1415		3	19.5	20.8	119.	108.	7.6	7.8	2.9	3.3
83-10-11	1520		3	9.0	19.5	115.	112.	7.6	7.8	2.8	4.5
83-11-02	1430		3	7.0	19.4	106.	110.	7.7	7.7	3.5	2.4
83-12-06	1540		3	.5	6.6	98.	106.	8.1	7.5	1.9	2.6

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-13	1550		3	30.	L1.	--	L.001	2.	2.	--	12.2
83-02-07	1530		3	30.	2.	--	L.001	4.	4.	--	12.6
83-03-14	1514		3	30.	2.	--	.002	2.	L2.	--	12.0
83-04-14	1540		3	40.	2.	--	.005	L2.	L2.	--	12.7
83-05-11	1527		3	30.	4.	--	.007	8.	L2.	--	11.9
83-06-13	1500		3	20.	4.	--	.005	4.	L2.	--	9.9
83-07-06	1555		3	30.	4.	--	.006	4.	L2.	--	9.0
83-08-09	1540		3	30.	7.	--	.006	10.	L2.	--	6.8
83-09-08	1415		3	20.	5.	--	.004	--	2.	--	7.9
83-10-11	1520		3	30.	4.	--	.002	2.	2.	--	10.1
83-11-02	1430		3	20.	4.	--	.006	L2.	L2.	--	11.0
83-12-06	1540		3	--	4.	--	.007	L2.	L2.	--	12.8

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-13	1550		3	0.	.0	57.	47.0	15.1	4.4	55.8	2.5
83-02-07	1530		3	0.	.0	59.	48.0	14.3	4.3	53.4	2.7
83-03-14	1514		3	0.	.0	59.	48.0	14.6	4.4	54.6	2.7
83-04-14	1540		3	0.	.0	57.	47.0	14.4	4.5	54.5	2.4
83-05-11	1527		3	0.	.0	56.	46.0	14.0	4.2	52.2	2.4
83-06-13	1500		3	0.	.0	54.	44.0	13.8	4.0	50.9	2.0
83-07-06	1555		3	0.	.0	52.	43.0	13.1	3.7	47.9	2.2
83-08-09	1540		3	0.	.0	59.	48.0	17.2	4.1	59.8	2.7
83-09-08	1415		3	0.	.0	54.	44.0	13.7	4.2	51.5	2.4
83-10-11	1520		3	0.	.0	54.	44.0	13.0	3.8	48.1	2.3
83-11-02	1430		3	0.	.0	56.	46.0 06L	14.3	3.9	51.8	2.8
83-12-06	1540		3	0.	.0	49.	40.0 06L	13.4	3.7	48.7	2.6

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-13	1550		3	.9	2.5	.06	5.	1.3	60.	--	.004
83-02-07	1530		3	.9	2.4	L.05	5.	1.8	60.	--	.003
83-03-14	1514		3	1.0	2.4	L.05	5.	2.4	62.	--	.003
83-04-14	1540		3	1.0	2.3	L.05	4.	2.6	60.	--	.003
83-05-11	1527		3	.9	2.2	L.05	5.	2.0	58.	--	.003
83-06-13	1500		3	.8	2.0	L.05	4.	2.0	55.	--	.005
83-07-06	1555		3	.8	1.8	.09	4.	1.6	53.	--	.003
83-08-09	1540		3	.8	2.4	.07	6.	1.3	63.	--	.008
83-08-08	1415		3	.9	2.5	.05	5.	.9	56.	--	.004
83-10-11	1520		3	.7	2.4	L.05	6.	1.0	55.	--	.005
83-11-02	1430		3	.9	2.2	.05	5.	.8 02L	58.	--	.002
	1430		3	--	--	.06 08L	--	--	--	--	--
83-12-06	1540		3	.9	2.1	.06	5	1.6 02L	54.	--	.003
	1840		3	--	--	.06 08L	--	--	--	--	--

DETAILED WATER QUALITY 1983
MANITOBA

STATION - 00MA05PF0022
WINNIPEG RIVER AT POINTE DU BOIS, MANITOBA

LAT. 50D 18M 2S LONG. 95D 33M 20S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-13	1550	3	.019	.007	.012	--	.38	.38	L.01	Q.39
83-02-07	1530	3	.019	.011	.008	--	.42	.41	L.01	Q.42
83-03-14	1514	3	091	.013	.078	--	.41	42	L.01	Q.43
83-04-14	1540	3	012	.003	009	--	.39	.39	L.01	Q.40
83-05-11	1527	3	.022	.009	.013	--	.34	.35	.05	40
83-06-13	1500	3	020	.008	.012	--	.31	.30	.04	.34
83-07-06	1555	3	.022	.019	.003	--	.33	.30	.03	.33
83-08-09	1540	3	.022	.004	.018	--	.28	.28	.03	.31
83-09-08	1415	3	.034	.022	.012	--	.32	.33	.05	.38
83-10-11	1520	3	.024	014	010	--	.36	.36	.06	.42
83-11-02	1430	3	.021	.008	.013	--	.30	.31	.25	.56
83-12-06	1540	3	.016	014	.002	--	.29	.31	.04	.35

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-13	1550	3	.09	L.1	8.4	.20	8.6	.08	.0005	L.0005
83-02-07	1530	3	10	L.1	9.3	.26	9.6	.07	.0007	L.0005
83-03-14	1514	3	.11	L.1	8.7	.21	8.9	.04	.0005	L.0005
83-04-14	1540	3	.11	L.1	9.3	.29	9.6	.06	L.0005	L.0005
83-05-11	1527	3	.03	L.1	9.2	.27	9.5	.06	L.0005	L.0005
83-06-13	1500	3	L.01	L.1	8.9	.27	9.2	.05	.0005	L.0005
83-07-06	1555	3	02	L.1	8.6	.20	8.8	.05	.0006	L.0005
83-08-09	1540	3	L.01	L.1	8.8	.20	9.0	.07	.0018 08D	.0001 08D
83-09-08	1415	3	L.01	L.1	8.5	.30	8.8	.06	.0017 08D	.0001 08D
83-10-11	1520	3	.03	L.1	7.8	.38	8.2	.08	.0032 08D	.0001 08D
83-11-02	1430	3	.03	L.1	8.3	1.70	10.0	.07	.0020 08D	L.0001 08D
83-12-06	1540	3	.08	L.1	9.6	.25	9.9	.09	.0014 08L	L.0001 08L

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-13	1550	3	--	--	--	L.01	--	L.04	.02	L.001
83-02-07	1530	3	--	--	--	L.01	--	05	.06	L.001
83-03-14	1514	3	--	--	--	L.01	--	.04	L.02	L.001
83-04-14	1540	3	--	--	--	L.01	--	.05	L.02	L.001
83-05-11	1527	3	--	--	--	L.01	--	12	L.02	L.001
83-06-13	1500	3	--	--	--	L.01	--	L.04	L.02	L.001
83-07-06	1555	3	--	--	--	L.01	--	.06	L.02	.001
83-08-09	1540	3	--	--	--	L.02	--	06	L.02	L.001 02P
83-09-08	1415	3	--	--	--	L.02	--	.06	L.02	.002 02P
83-10-11	1520	3	--	--	--	L.01	--	.04	L.02	.001 02P
83-11-02	1430	3	--	--	--	L.01	--	L.04	L.02	.001 02P
83-12-06	1540	3	--	--	--	L.02	--	L.04	L.02	.002 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-13	1550	3	--	L.002	L.002	.001	L.001	L.001	L.05	L.004
83-02-07	1530	3	--	L.002	L.002	.003	.005	L.001	L.05	L.004
83-03-14	1514	3	--	L.002	.002	.004	--	L.001	L.05	.006
83-04-14	1540	3	--	L.002	L.002	.001	--	L.001	L.05	L.004
83-05-11	1527	3	--	L.002	L.002	.001	.003	L.001	L.05	L.004
83-06-13	1500	3	--	L.002	L.002	.001	.003	L.001	L.05	L.004
83-07-06	1555	3	--	L.002	L.002	.001	.002	L.001	L.05	L.004
83-08-09	1540	3	--	L.002 02P	L.002 02P	L.001 05P	.002 05P	L.001 02P	L.05 01P	L.004 02P
83-09-08	1415	3	--	L.001 02P	.007 02P	.002 05P	.001 05P	L.001 02P	L.10 01P	L.001 02P
83-10-11	1520	3	--	L.001 02P	.001 02P	.003 05P	.002 05P	L.001 02P	.38 01P	.001 02P
83-11-02	1430	3	--	L.001 02P	.002 02P	.003 05P	.004 05P	.001 02P	L.10 01P	.002 02P
83-12-06	1540	3	--	L.001 02P	.002 02P	.003 05P	.002 05P	L.001 02P	L.10 01P	.002 02P

STATION - 00MA05PF0022
WINNIPEG RIVER AT POINTE DU BOIS, MANITOBA LAT. 50D 18M 2S LONG. 95D 33M 20S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-13	1550	3	.003	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-02-07	1530	3	.003	L.001	.005	L.001	L.001	L.002	L.001	L.001
83-03-14	1514	3	.002	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-04-14	1540	3	.005	L.001	.005	L.001	L.001	L.002	L.001	L.001
83-05-11	1527	3	.007	L.001	.004	L.001	L.001	L.002	L.001	L.001
83-06-13	1500	3	.004	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-07-06	1555	3	.009	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-08-09	1540	3	.005	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-09-08	1415	3	.004	--	--	--	--	--	--	--
83-10-11	1520	3	.003	--	--	--	--	--	--	--
83-11-02	1430	3	.002	--	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-13	1550	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-02-07	1530	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-14	1514	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-14	1540	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-11	1527	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-13	1500	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-06	1555	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-09	1540	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-13	1550	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-02-07	1530	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-14	1514	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-04-14	1540	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-11	1527	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-06-13	1500	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-07-06	1555	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-09	1540	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-13	1550	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-02-07	1530	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-14	1514	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-14	1540	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-11	1527	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-13	1500	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-06	1555	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-09	1540	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--

FOOTNOTE L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
MANITOBA

STATION - 00MA05RA0004
MANIGOTAGAN RIVER AT HWY 304 BRIDGE, MANIGOTAGAN, MANITOBA LAT. 51D 5M 53S LONG. 96D 16M 59S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-13	1135	3	.0	14.0	60.	75.	8.3	7.3	5.6	5.5
83-02-07	1130	3	.0	15.0	60.	70.	8.3	7.3	4.8	4.8
83-03-14	1115	3	.5	19.5	71.	71.	7.9	7.4	6.8	3.8
83-04-14	1135	3	1.0	23.8	60.	63.	7.5	7.1	6.0	2.5
83-05-11	1105	3	10.0	21.8	58.	60.	7.5	7.2	4.3	2.7
83-06-13	1050	3	20.0	22.5	64.	68.	7.5	7.1	4.2	1.5
83-07-06	1104	3	19.0	13.4	61.	65.	7.2	7.1	2.0	1.8
83-08-09	1155	3	24.0	21.8	62.	68.	7.7	7.2	1.1	1.5
83-09-08	1040	3	19.0	20.7	66.	69.	7.6	7.4	1.9	1.9
83-10-11	1111	3	8.0	20.4	76.	69.	7.4	7.5	3.3	3.1
83-11-02	1020	3	6.0	19.3	66.	74.	7.4	7.4	3.0	3.0
83-12-06	1150	3	.0	6.0	74.	75.	7.7	7.3	3.1	3.1

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-13	1135	3	70.	7.	--	.002	16.	2.	--	12.8
83-02-07	1130	3	60.	5.	--	.002	14.	12.	--	13.0
83-03-14	1115	3	60.	6.	--	.001	8.	4.	--	13.5
83-04-14	1135	3	80.	2.	--	.002	10	6.	--	13.5
83-05-11	1105	3	90.	4.	--	.008	6.	2.	--	10.0
83-06-13	1050	3	80.	5.	--	.004	48.	L2.	--	8.2
83-07-06	1104	3	90.	3.	--	.006	L2.	L2.	--	8.7
83-08-09	1155	3	60.	5.	--	.020	10.	10.	--	7.5
83-09-08	1040	3	50.	2.	--	.001	--	12.	--	7.2
83-10-11	1111	3	50.	3.	--	.006	5.	2.	--	10.6
83-11-02	1020	3	50.	2.	--	.002	L2.	L2.	--	11.2
83-12-06	1150	3	50.	2.	--	.004	2.	L2.	--	13.3

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-13	1135	3	0.	.0	35.	29.0	9.8	3.3	38.1	1.5
83-02-07	1130	3	0.	.0	34.	28.0	9.6	3.2	37.1	1.3
83-03-14	1115	3	0.	.0	35.	29.0	9.1	3.1	35.5	1.3
83-04-14	1135	3	0.	.0	30.	25.0	8.0	2.7	31.1	.9
83-05-11	1105	3	0.	.0	28.	23.0	7.0	2.8	29.0	1.0
83-06-13	1050	3	0.	.0	33.	27.0	8.7	3.3	35.3	1.2
83-07-06	1104	3	0.	.0	30.	25.0	8.5	3.0	33.6	1.4
83-08-09	1155	3	0.	.0	33.	27.0	8.8	3.0	34.3	1.4
83-09-08	1040	3	0.	.0	35.	29.0	9.5	3.1	36.5	1.1
83-10-11	1111	3	0.	.0	33.	27.0	8.3	2.8	32.3	.9
83-11-02	1020	3	0.	.0	34.	28.0 08L	8.9	2.9	34.2	1.2
83-12-06	1150	3	0.	.0	30.	24.9 06L	9.4	3.1	36.2	1.4

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE - DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-13	1135	3	.8	1.1	L.05	4.	1.0	39.	--	--
83-02-07	1130	3	.7	1.0	L.05	4.	1.0	38.	--	--
83-03-14	1115	3	.7	1.0	L.05	4.	1.2	38.	--	--
83-04-14	1135	3	1.5	1.2	L.05	4.	1.8	35.	--	--
83-05-11	1105	3	1.2	1.2	.06	4.	.8	32.	--	--
83-06-13	1050	3	.8	1.1	L.05	4.	.8	36.	--	--
83-07-06	1104	3	.7	1.1	.06	5.	1.6	36.	--	--
83-08-09	1155	3	.6	1.0	.10	5.	1.2	37.	--	--
83-09-08	1040	3	.7	.9	.06	4.	1.6	38.	--	--
83-10-11	1111	3	.7	1.1	L.05	4.	1.5	36.	--	--
83-11-02	1020	3	.8	1.0	L.05	4.	.5 02L	36.	--	--
	1020	3	--	--	L.05 08L	--	--	--	--	--
83-12-06	1150	3	.9	1.0	--	4.	.7 02L	35.	--	--

STATION - 00MA05RA0004
MANIGOTAGAN RIVER AT HWY 304 BRIDGE. MANIGOTAGAN, MANITOBA LAT. 51D 5M 53S LONG. 95D 16M 59S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-13	1135	3	.027	.010	.017	--	.50	.50	.07	.57
83-02-07	1130	3	.044	.016	.028	--	.50	.54	.07	.61
83-03-14	1115	3	.096	.027	.069	--	.50	.51	.04	.55
83-04-14	1135	3	.048	.014	.034	--	.49	.49	.12	.61
83-05-11	1105	3	.050	.024	.026	--	.55	.55	.06	.61
83-06-13	1050	3	.023	.013	.010	--	.53	.51	L.01	0.52
83-07-06	1104	3	.029	.018	.011	--	.56	.56	.03	.59
83-08-09	1155	3	.028	.009	.019	--	.41	.41	.04	.45
83-09-08	1040	3	.029	.023	.006	--	.45	.47	.03	.50
83-10-11	1111	3	.023	.015	.008	--	.47	.47	.06	.53
83-11-02	1020	3	.024	.013	.011	--	.38	.39	.08	.47
83-12-06	1150	3	.017	.014	.003	--	.47	.39	.05	.44

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-13	1135	3	.07	L.1	14.0	.53	14.5	.14	L.0005	L.0005
83-02-07	1130	3	.09	L.1	5.6	.51	6.1	.10	L.0005	L.0005
83-03-14	1115	3	.10	L.1	15.0	.38	15.4	.12	L.0005	L.0005
83-04-14	1135	3	.08	L.1	14.0	.68	14.7	.10	L.0005	L.0005
83-05-11	1105	3	L.01	L.1	16.0	.36	16.4	.13	L.0005	L.0005
83-06-13	1050	3	L.01	L.1	18.0	.40	18.4	.11	L.0005	L.0005
83-07-06	1104	3	.02	L.1	19.0	.31	19.3	.12	L.0005	L.0005
83-08-09	1155	3	L.01	L.1	15.0	.29	15.3	.13	.0011 08D	L.0001 08D
83-09-08	1040	3	.03	L.1	14.0	.21	14.2	.09	.0018 08D	.0002 08D
83-10-11	1111	3	.04	L.1	11.0	.39	11.4	.10	.0018 08D	L.0001 08D
83-11-02	1020	3	.02	L.1	12.0	.49	12.5	.10	.0020 08D	.0001 08D
83-12-06	1150	3	.04	L.1	15.0	.38	15.4	.11	.0010 08D	.0001 08D
	1150	3	--	--	--	--	--	--	.0010 08L	.0001 08L

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-13	1135	3	--	--	--	02	--	.25	.02	--
83-02-07	1130	3	--	--	--	.01	--	.17	.02	--
83-03-14	1115	3	--	--	--	.01	--	.18	L.02	--
83-04-14	1135	3	--	--	--	.08	--	.21	L.02	--
83-05-11	1105	3	--	--	--	.01	--	.27	L.02	--
83-06-13	1050	3	--	--	--	02	--	.14	L.02	--
83-07-06	1104	3	--	--	--	L.01	--	.26	L.02	--
83-08-09	1155	3	--	--	--	L.02	--	.17	L.02	--
83-09-08	1040	3	--	--	--	03	--	.17	L.02	--
83-10-11	1111	3	--	--	--	L.01	--	.11	L.02	--
83-11-02	1020	3	--	--	--	L.01	--	.14	L.02	--
83-12-06	1150	3	--	--	--	L.02	--	.18	L.02	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
MANITOBA

STATION - 00MA05UH0001
NELSON RIVER NEAR MOUTH (ABOVE WEIR RIVER). LAT. 58D 54M 20S LONG 98D 21M 50S

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG C.	02061L TEMP. WATER DEG C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-06 1300	1	.0	18.2	--	333.	--	7.9	--	20.0
83-04-15 1200	1	.0	22.4	--	315.	--	7.7	--	410.0
83-09-29 1330	1	8.0	23.3	--	225.	--	8.1	--	20.0

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101M OXYGEN DISSOLVED BO 02 MG/L
83-01-06 1300	1	30	18.	--	--	--	--	--	--
83-04-15 1200	1	10	700.	--	--	--	--	--	--
83-09-29 1330	1	30	36.	--	--	--	--	--	--

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-06 1300	1	0	0	152.	125.0	36.5	13.8	148.0	20.0
83-04-15 1200	1	0	0	140.	115.0	29.5	10.6	117.3	17.0
83-09-29 1330	1	0	0	106.	87.0	22.6	6.7	84.0	8.7

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	05604P CYANIDE TOTAL CN MG/L
83-01-06 1300	1	3.1	20.0	.09	28.	2.1	199.	--	--
83-04-15 1200	1	2.6	18.0	L.05	24.	2.0	173.	--	--
83-09-29 1330	1	1.7	8.6	L.05	13.	2.6	116.	--	--

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-06 1300	1	.034	.008 03L	.026	--	--	.47	.08	.55
83-04-15 1200	1	.390	.024 03L	.366	--	--	.45	1.20	1.65
83-09-29 1330	1	.120	.017 03L	.103	--	--	.38	.12	.50

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-06 1300	1	.06	--	9.1	.59	9.7	05 05L	0007 04L	L.0005 02L
83-04-15 1200	1	.15	--	7.4	13.60	20.4	05 05L	0005 04L	L.0005 02L
83-09-29 1330	1	03	--	7.8	2.00	9.8	--	.0022 08L	L.0001 08L

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-06 1300	1	--	--	.01	--	.19	--	--	001
83-04-15 1200	1	--	--	.58	--	7.40	--	--	037
83-09-29 1330	1	--	--	--	--	--	--	--	.003 02P

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-06 1300	1	--	L.002	L.002	.006	.008	L.001	L.05	L.004
83-04-15 1200	1	--	.014	.038	.025	.058	L.001	.17	.011
83-09-29 1330	1	--	L.001 02P	.002 02P	.007 05P	.005 05P	L.001 02P	L.10 01P	.002 02P

STATION - 00MA05BA0001
COCHRANE RIVER NEAR BROCHET, MANITOBA

LAT. 58D 0M 0S LONG. 101D 23M 44S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-04-13	1145	1	5	27.5	--	43.	--	6.8	--	.6
83-06-28	1200	1	13.0	22.8	26.	30.	7.6	7.1	--	1.1
83-08-09	1200	1	19.0	20.9	25.	29.	7.4	7.3	--	1.0
83-09-13	1115	1	12.0	18.7	25.	27.	--	8.3	--	1.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-04-13	1145	1	10.	2.	--	--	--	--	--	--
83-06-28	1200	1	20.	1.	--	--	--	--	--	--
83-08-09	1200	1	20.	2.	--	--	--	--	--	--
83-09-13	1115	1	20.	1	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-04-13	1145	1	0.	.0	18.	15.0	4.0	1.8	17.4	1.5
83-06-28	1200	1	0.	.0	12.	9.6	2.5	.8	9.5	1.1
83-08-09	1200	1	0.	.0	12.	9.8	3.0	1.3	12.8	1.1
83-09-13	1115	1	0.	.0	11	9.4	2.8	.9	10.7	.9

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-04-13	1145	1	.9	.7	.06	3.	3.2	24.	--	--
83-06-28	1200	1	.7	.6	.11	2.	2.1	15.	--	--
83-08-09	1200	1	.5	.5	.12	3.	1.7	17.	--	--
83-09-13	1115	1	.6	.5	.08	3.	2.4	17.	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-04-13	1145	1	.010	.007 03L	.003	--	--	.31	.04	.35
83-06-28	1200	1	.014	.005 03L	.009	--	--	.28	.03	.31
83-08-09	1200	1	.016	.003 03L	013	--	--	.15	.02	.17
83-09-13	1115	1	.015	.005 03L	.010	--	--	.20	.06	.26

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-04-13	1145	1	.07	--	4.9	.27	5.2	.03 05L	L.0005 04L	L.0005 02L
83-06-28	1200	1	.01	--	4.9	.21	5.1	.04 05L	L.0005 04L	L.0005 02L
83-08-09	1200	1	L.01	--	3.9	.14	4.0	.03 05L	L.0005 08L	L.0005 08L
83-09-13	1115	1	L.01	--	4.6	.46	5.1	.05 05L	.0011 08L	L.0001 08L

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-04-13	1145	1	--	--	L.01	--	.04	--	--	L.001
83-06-28	1200	1	--	--	.02	--	.11	--	--	L.001
83-08-09	1200	1	--	--	--	--	--	--	--	L.001 02P
83-09-13	1115	1	--	--	--	--	--	--	--	L.001 02P

DETAILED WATER QUALITY 1983
MANITOBA

STATION - OCMA05DA0001
COCHRANE RIVER NEAR BROCHET, MANITOBA

LAT. 58D 0M 0S LONG. 101D 23M 44S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-04-13	1145	1	--	L.002	L.002	.003	--	L.001	L.05	L.004
83-08-28	1200	1	--	L.002	L.002	.005	.003	L.001	L.05	L.004
83-08-09	1200	1	--	L.002 02P	L.002 02P	.005 05P	.004 05P	L.001 02P	L.05 01P	L.004 02P
83-09-13	1115	1	--	.001 02P	.001 02P	.003 05P	.003 05P	L.001 02P	L.10 01P	L.001 02P

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00MA06FD0002
CHURCHILL RIVER ABOVE RED HEAD RAPIDS MANITOBA LAT. 58D 7M 14S LONG. 94D 37M 30S

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-14 0900	1	.0	22.1	--	148.	--	8.1	--	3.4
83-04-16 1400	1	.5	28.0	--	178.	--	7.5	--	2.5
83-06-14 1457	1	5.0	21.3	75.	84.	6.5	7.6	--	37.0

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-14 0900	1	20.	3.	--	--	--	--	--	--
83-04-16 1400	1	20.	1.	--	--	--	--	--	--
83-06-14 1457	1	80.	38.	--	--	--	--	--	--

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-14 0900	1	0.	.0	88.	72.0	22.2	6.0	80.1	1.8
83-04-16 1400	1	0.	.0	107.	88.0	26.3	6.3	91.6	2.3
83-06-14 1457	1	0.	.0	48.	39.0	13.3	2.7	44.3	.9

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	18104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-14 0900	1	.9	1.5	L.05	4	3.3	83.	--	--
83-04-16 1400	1	1.1	1.8	L.05	4.	4.0	95.	--	--
83-06-14 1457	1	.3	1.0	L.05	3.	2.0	47.	--	--

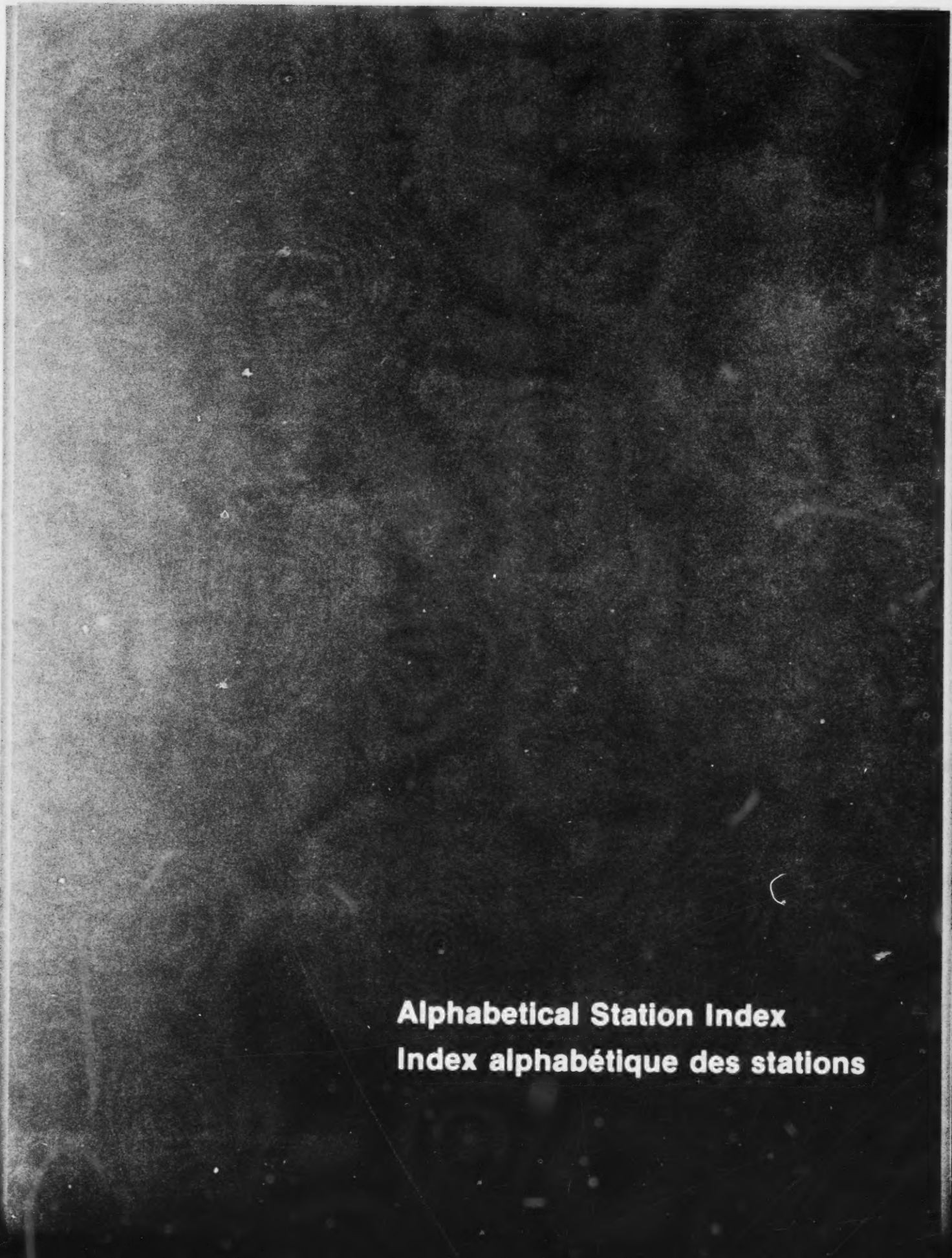
DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07851D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-14 0900	1	.014	.004 03L	.010	--	--	.29	.05	.34
83-04-16 1400	1	.012	.003 03L	.009	--	--	.43	.07	.50
83-06-14 1457	1	.068	.016 03L	.052	--	--	.21	.14	.35

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-14 0900	1	.06	--	7.6	.39	8.0	.06 05L	L.0005 04L	L.0005 02L
83-04-16 1400	1	.14	--	7.4	.41	7.8	.06 05L	L.0005 04L	L.0005 02L
83-06-14 1457	1	L.01	--	9.2	1.10	10.3	.08 05L	L.0005 04L	L.0005 02L

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-14 0900	1	--	--	L.01	--	.08	--	--	L.001
83-04-16 1400	1	--	--	L.01	--	.12	--	--	L.001
83-06-14 1457	1	--	--	.05	--	.88	--	--	.003

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-14 0900	1	--	L.002	L.002	.005	.012	L.001	L.05	.400
83-04-16 1400	1	--	L.002	L.002	.004	--	L.001	L.05	L.004
83-06-14 1457	1	--	L.002	L.002	.005	L.001	L.001	L.05	L.004

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

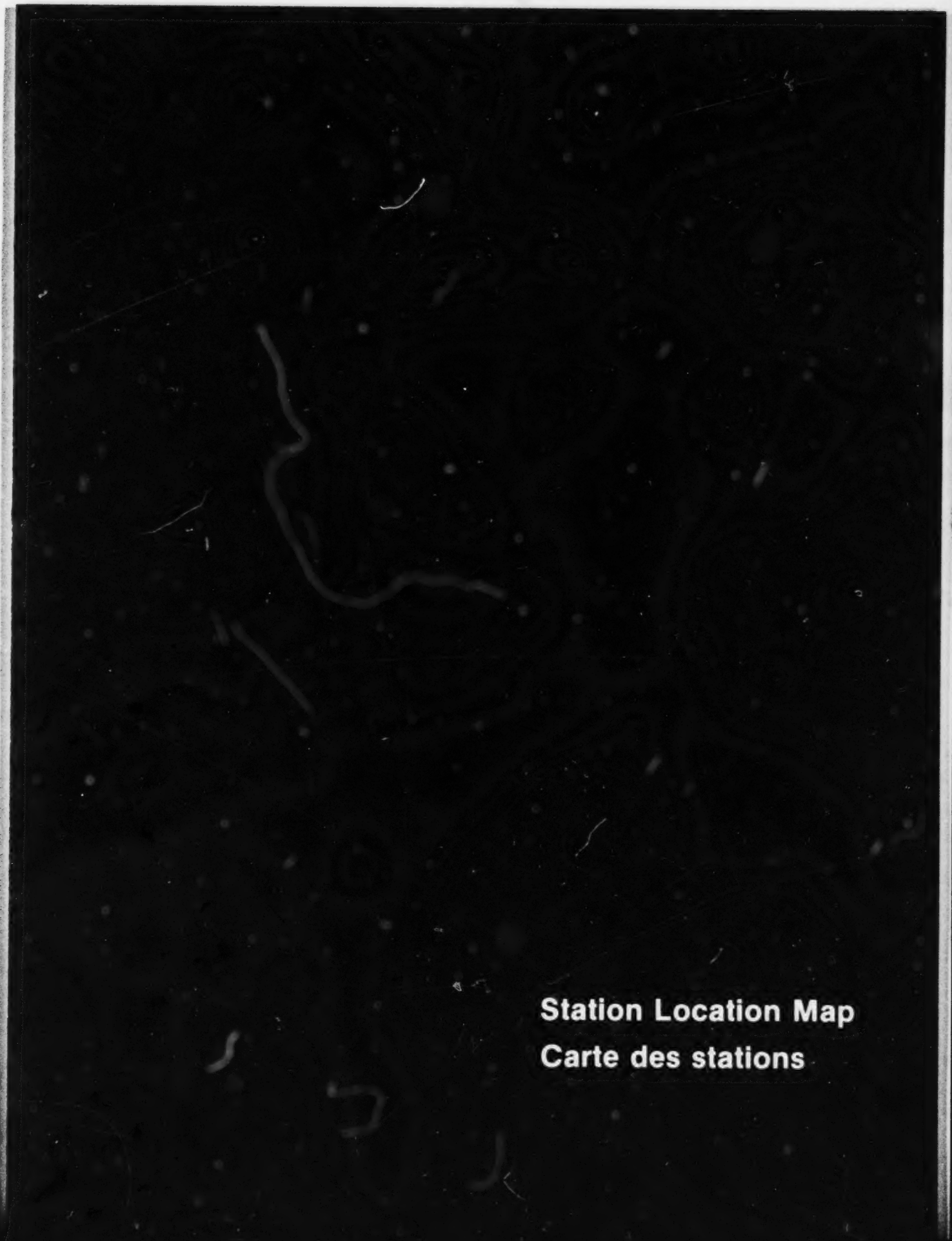


Alphabetical Station Index
Index alphabétique des stations

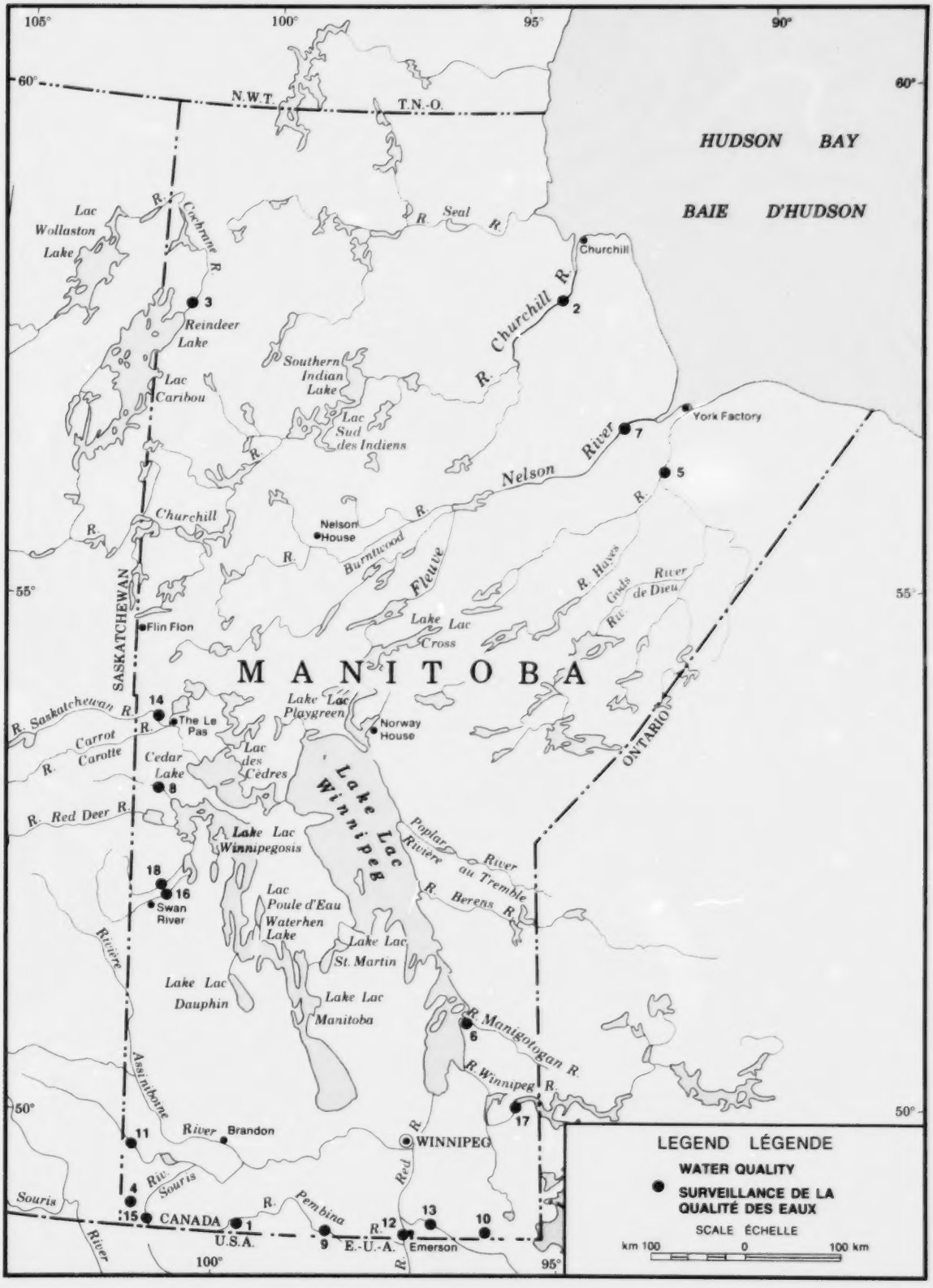
WATER QUALITY STATIONS: ALPHABETICAL INDEX

MANITOBA

Location Description	Station Number	Latitude D	M	S	Longitude D	M	S	Page Number	Map Number
BADGER CREEK AT CARTWRIGHT, MANITOBA	00MA05OA0003 97900S 007	49	6	15	99	19	22	109	1
CHURCHILL RIVER ABOVE RED HEAD RAPIDS MANITOBA	00MA06FD0002 97900S 001	58	7	14	94	37	30	129	2
COCHRANE RIVER NEAR BROCHET, MANITOBA	00MA06DA0001 97900S 002	58	0	0	101	23	44	127	3
GAINSBOROUGH CREEK AT HWY 83, 1.92KM. ABOVE MOUTH, MANITOBA	00MA05NF0005 97900S 003	49	9	29	101	2	48	105	4
HAYES RIVER BELOW JUNCTION WITH GODS RIVER, MANITOBA	00MA04AB0001 97900S 031	56	25	54	92	47	17	89	5
MANIGOTAGAN RIVER AT HWY 304 BRIDGE, MANIGOTAGAN, MANITOBA	00MA05RA0004 97900S 001	51	5	53	96	16	59	124	6
NELSON RIVER NEAR MOUTH (ABOVE WEIR RIVER).	00MA05UH0001 97900S 001	56	54	20	93	21	50	126	7
OVERFLOWING RIVER AT HWY 10 MANITOBA	00MA05LD0001 97900S 001	53	9	15	101	6	29	94	8
PEMBINA RIVER AT WINDYGATES, MANITOBA	00MA05OB0001 97900S 007	49	1	53	98	16	40	110	9
PINE CREEK DIVERSION AT HWY 89, MANITOBA	00MA05OD0012 97900S 027	49	1	23	95	58	40	120	10
PIPESTONE CREEK 0.25 MILE FROM CROMER OFF BRIDGE ON HWY 255, MANITOBA	00MA05NQ0013 97900S 002	49	44	17	101	14	8	108	11
RED RIVER AT EMERSON, MANITOBA	00MA05OC0001 97900S 001	49	0	29	97	12	38	113	12
ROSEAU RIVER AT GARDENTON, MANITOBA	00MA05OD0001 97900S 004	49	5	16	96	41	15	117	13
SASKATCHEWAN RIVER ABOVE CARROT RIVER, MANITOBA	00MA05KH0001 97900S 031	53	50	30	101	20	3	91	14
SOURIS RIVER AT COULTER, MANITOBA	00MA05NF0001 97900S 012	49	5	27	100	56	51	101	15
SWAN RIVER AT HWY 10, MANITOBA	00MA05LE0002 97900S 001	52	7	30	101	15	5	97	16
WINNIPEG RIVER AT POINTE DU BOIS, MANITOBA	00MA05PF0022 97900S 003	50	18	2	95	33	20	121	17
WOODY RIVER AT HWY 10, MANITOBA	00MA05LE0003 97900S 001	52	12	29	101	15	5	99	18



Station Location Map
Carte des stations



WATER QUALITY BRANCH MONITORING STATIONS 1983

STATIONS DE SURVEILLANCE DE LA DIRECTION DE LA QUALITÉ DES EAUX 1983

NORTHWEST TERRITORIES
TERRITOIRES DU NORD-OUEST

Detailed Data / Données détaillées

STATION - 00NN08JC0001
THELON RIVER ABOVE BEVERLY LAKE

LAT. 64D 32M 8S LONG. 101D 23M 48S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-02-22 1300 1	.0	18.9	--	70.	--	6.6	--	1.5

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-02-22 1300 1	10.	2.	--	--	--	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-02-22 1300 1	0.	.0	13.	11.0	5.3	2.7	24.4	2.0

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-02-22 1300 1	1.1	7.6	L.05	6	1.0	32.	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-02-22 1300 1	.018	.003 03L	.015	--	--	.69	.09	.78

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-02-22 1300 1	.19	--	2.9	.82	3.7	.03 05L	L.0005 04L	L.0005 02L

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-02-22 1300 1	--	--	L.01	--	.10	--	--	L.001

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-02-22 1300 1	--	L.002	L.002	.009	--	.002	.05	L.004

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
NORTHWEST TERRITORIES

STATION - 00NW06LC0001
KAZAN RIVER ABOVE KAZAN FALLS, NORTHWEST TERRITORIES LAT. 63D 38M 58S LONG. 95D 51M 15S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-03-02 1545 1	.0	19.3	--	35.	--	6.9	--	1.0

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	05717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-03-02 1545 1	10.	2.	--	--	--	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-03-02 1545 1	0.	.0	16.	13.0	3.5	1.3	14.1	1.0

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-03-02 1545 1	.8	.9	.06	1.	L.1	Q17.	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-03-02 1545 1	.003	L.003 03L	Q.000	--	--	.43	.07	.50

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-03-02 1545 1	.07	--	4.2	.39	4.6	.03 05L	L.0005 04L	L.0005 02L

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-03-02 1545 1	--	--	L.01	--	L.04	--	--	L.001

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-03-02 1545 1	--	L.002	L.002	.001	--	L.001	L.05	L.004

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00NN07080001
HAY RIVER NEAR HAY RIVER NORTHWEST TERRITORIES LAT. 60D 44M 44S LONG. 115D 51M 20S

DATE	TIME/ YMD/AMJ	SUB-ID/ HEURE	SOUS-ID	02061F TEMP. WATER DEG. C	02061L TEMP. WATER DEG. C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-02-09	1030	1		0	14.5	640	623.	7.5	7.2	--	5.5
83-03-24	1015	1		.0	24.0	--	663.	7.5	7.1	--	6.5
83-04-28	1115	1		3.0	19.9	--	452.	--	7.7	--	115.0
83-05-05	0825	1		2.0	18.7	--	244.	--	7.6	--	170.0
83-05-26	0900	1		10.0	21.9	--	291.	--	7.6	--	48.0
83-07-06	1920	1		18.0	21.7	--	340.	--	7.8	--	50.0
83-08-10	1115	1		23.0	23.7	--	305.	--	8.1	--	25.0
83-11-18	1115	1		0	18.1	450.	435.	7.9	7.9	--	6.5

DATE	TIME/ YMD/AMJ	SUB-ID/ HEURE	SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-02-09	1030	1		60.	2. 01R	--	--	--	--	--	--
83-03-24	1015	1		50	4	--	--	--	--	--	--
83-04-28	1115	1		60.	190.	--	--	--	--	--	--
83-05-05	0825	1		120	414	--	--	--	--	--	--
83-05-26	0900	1		120	91	--	--	--	--	--	--
83-07-06	1920	1		100	45	--	--	--	--	--	--
83-08-10	1115	1		110.	14	--	--	--	--	--	--
83-11-18	1115	1		120	L1	--	--	--	--	--	--

DATE	TIME/ YMD/AMJ	SUB-ID/ HEURE	SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-02-09	1030	1		0	0	262.	215.0	84.5	24.6	312.3	30.0
83-03-24	1015	1		0.	.0	262.	215.0	85.2	24.6	314.0	29.0
83-04-28	1115	1		0.	.0	158.	130.0	54.0	16.4	202.4	18.0
83-05-05	0825	1		0.	0	66.	54.0	29.0	7.6	103.7	8.9
83-05-26	0900	1		0.	0	52.	43.0	33.5	9.8	124.0	9.3
83-07-06	1920	1		0	0	83.	68.0	40.4	11.5	148.2	10.0
83-08-10	1115	1		0.	.0	104.	85.0	37.4	10.1	135.0	10.0
83-11-18	1115	1		0.	.0	165.	135.0 08L	55.0	15.1	199.5	16.6

DATE	TIME/ YMD/AMJ	SUB-ID/ HEURE	SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-02-09	1030	1		3.4	12.0	.14	128.	5.1	417.	--	--
83-03-24	1015	1		3.2	14.0	.08	120.	6.0	411	--	--
83-04-28	1115	1		2.7	9.3	.07	87.	4.6	270	--	--
83-05-05	0825	1		3.6	2.8	.05	52.	4.2	141.	--	--
83-05-26	0900	1		2.3	3.1	L.05	82.	3.8	169	--	--
83-07-06	1920	1		2.4	2.5	.14	80.	4.3	192.	--	--
83-08-10	1115	1		2.0	2.0	.22	57.	5.1	175.	--	--
83-11-18	1115	1		2.0	5.7	--	77.	2.4 02L	255.	--	--

DATE	TIME/ YMD/AMJ	SUB-ID/ HEURE	SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-02-09	1030	1		.028 06R	.013 03R	.015	--	--	.92 51R	.05 02R	.97
83-03-24	1015	1		.022	L.003 03L	Q.019	--	--	1.00	.10	1.10
83-04-28	1115	1		.170	.023 03L	.147	--	--	.80	.53	1.33
83-05-05	0825	1		.460	.061 03L	.399	--	--	.54	1.40	1.94
83-05-26	0900	1		.120	.031 03L	.089	--	--	.67	.23	.90
83-07-06	1920	1		.096	.031 03L	.065	--	--	.87	.19	1.06
83-08-10	1115	1		.057	.028 03L	.029	--	--	.83	.06	.89
83-11-18	1115	1		.022	.014 03L	.008	--	--	.77	.08	.85

DETAILED WATER QUALITY 1983
NORTHWEST TERRITORIES

STATION - 00NH07080001
HAY RIVER NEAR HAY RIVER NORTHWEST TERRITORIES LAT. 60D 44M 44S LONG. 115D 51M 20S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-02-09	1030	1	.47 10R	--	21.0 04R	.53 02R	21.5	.15 05L	L.0005 04L	L.0005 02L
83-03-24	1015	1	.49	--	20.0	.59	20.6	L.02 05L	L.0005 04L	L.0005 02L
83-04-28	1115	1	.31	--	17.0	3.80	20.8	.12 05L	L.0005 04L	L.0005 02L
83-06-05	0825	1	.08	--	19.0	11.00	30.0	.16 05L	L.0005 04L	L.0005 02L
83-06-26	0900	1	.01	--	27.0	2.60	29.6	.17 05L	L.0005 04L	L.0005 02L
83-07-06	1920	1	.22	--	24.0	1.40	25.4	.15 05L	.0006 04L	L.0005 02L
83-08-10	1115	1	.28	--	23.0	.40	23.4	.27 05L	.0016 08L	L.0005 08L
83-11-18	1115	1	.21	--	23.0	.51	23.5	--	.0015 08L	.0002 08L

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-02-09	1030	1	--	--	L.01 04W	--	.73 04W	--	--	L.001 20W
83-03-24	1015	1	--	--	L.01	--	.65	--	--	L.001
83-04-28	1115	1	--	--	.35	--	3.40	--	--	.005
83-06-05	0825	1	--	--	.37	--	7.20	--	--	.020
83-06-26	0900	1	--	--	.10	--	1.90	--	--	.006
83-07-06	1920	1	--	--	.08	--	1.50	--	--	.005
83-08-10	1115	1	--	--	--	--	--	--	--	.003 02P
83-11-18	1115	1	--	--	L.02	--	1.10	--	--	.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-02-09	1030	1	--	L.002 20W	L.002 20W	004 20W	009 20W	L.001 20W	.08 20W	L.004 20W
83-03-24	1015	1	--	L.002	L.002	004	--	L.001	.05	L.004
83-04-28	1115	1	--	.002	.015	.006	.016	L.001	.05	L.004
83-06-05	0825	1	--	005	.021	.017	.048	L.001	.15	.006
83-06-26	0900	1	--	L.002	.005	.007	016	L.001	L.05	L.004
83-07-06	1920	1	--	L.002	.007	.004	.012	L.001	.07	L.004
83-08-10	1115	1	--	L.002 02P	.004 02P	.004 05P	007 05P	L.001 02P	.07 01P	L.004 02P
83-11-18	1115	1	--	L.001 02P	.004 02P	.003 05P	.004 05P	L.001 02P	L.10 01P	.002 02P

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - **OONNO7RD0001**
LOCKHART RIVER AT OUTLET OF ARTILLERY LAKE

LAT. 62D 53M 20S LONG. 109D 28M 18S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		02061F TEMP. WATER DEG C.	02061L TEMP. WATER DEG C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-06-10 2130	1	2.0	18.9	15	16	--	6.9	--	.2
83-07-11 1700	1	5.0	20.4	16	17	--	7.1	--	1.0
83-08-24 1700	1	16.0	23.7	20	30	7.4	7.2	--	4
83-11-24 1100	1	0	6.8	16	25	7.6	7.6	--	2

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-06-10 2130	1	L5	L1	--	--	--	--	--	--
83-07-11 1700	1	L5	1	--	--	--	--	--	--
83-08-24 1700	1	L5	2	--	--	--	--	--	--
83-11-24 1100	1	L5	L1	--	--	--	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-06-10 2130	1	0	0	5	4.5	1.4	7	6.4	7
83-07-11 1700	1	0	0	6	5.0	1.2	6	5.5	5
83-08-24 1700	1	0	0	5	4.5	1.8	5	6.6	3.0
83-11-24 1100	1	0	0	16	13.2 06L	4.9	7	15.1	5

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-06-10 2130	1	4	L1	L.05	2	2	Q8	--	--
83-07-11 1700	1	.5	.5	L.05	1	3	8	--	--
83-08-24 1700	1	.9	1.6	.07	2	3	15	--	--
83-11-24 1100	1	4	4	L.05 08L	2	1 02L	17	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-06-10 2130	1	.007	.005 03L	L.006	--	--	.14	L.01	14
83-07-11 1700	1	.003	.003 03L	L.006	--	--	09	L.01	09
83-08-24 1700	1	.016	.003 03L	.013	--	--	12	02	14
83-11-24 1100	1	.009	L.003 03L	008	--	--	09	L.01	09

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-06-10 2130	1	.03	--	2.1	.03	2.1	L.02 05L	L.0005 04L	L.0005 02L
83-07-11 1700	1	.02	--	1.7	.06	1.8	L.02 05L	L.0005 04L	L.0005 02L
83-08-24 1700	1	.01	--	2.3	.11	2.4	.05 05L	.0015 08L	L.0001 08L
83-11-24 1100	1	.02	--	1.4	.03	1.4	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-06-10 2130	1	--	--	L.01	--	L.04	--	--	L.001
83-07-11 1700	1	--	--	--	--	--	--	--	L.001
83-08-24 1700	1	--	--	--	--	--	--	--	L.001 02P
83-11-24 1100	1	--	--	L.02	--	L.04	--	--	L.001 02P

DETAILED WATER QUALITY 1983
NORTHWEST TERRITORIES

STATION - **00HN07RD0001**
LOCKHART RIVER AT OUTLET OF ARTILLERY LAKE

LAT. 62D 53M 20S LONG. 108D 28M 18S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-06-10	2130	1	--	L.002	L.002	001	.003	L.001	L.05	L.004
83-07-11	1700	1	--	L.002	L.002	L 001	.002	L.001	05	L.004
83-08-24	1700	1	--	L.001 02P	.002 02P	L.001 05P	.001 05P	L.001 02P	L.10 01P	L.001 02P
83-11-24	1100	1	--	L.001 02P	002 02P	008 05P	.003 05P	L.001 02P	L.10 01P	L.001 02P

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - OONH10EA0004
FLAT RIVER NEAR THE MOUTH

LAT. 61D 31M 59S LONG. 125D 24M 20S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG.C	02061L TEMP. WATER DEG.C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-04-13 1455 1	1.0	23.1	350	372	7.9	8.0	--	1.0

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-04-13 1455 1	20	2	--	--	--	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-04-13 1455 1	0	0	201	165.0	60.0	12.6	201.7	1.8

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-04-13 1455 1	1.4	1.0	L.05	36.	6.4	218.	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-04-13 1455 1	.010	--	--	--	--	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-04-13 1455 1	--	--	--	--	--	06.05L	L.0005 04L	L.0005 02L

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-04-13 1455 1	--	--	L.01	--	10	--	--	L.001

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-04-13 1455 1	--	L.002	.004	.001	--	L.001	L.05	L.004

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
NORTHWEST TERRITORIES

STATION - 00NN10EB0002
LIARD RIVER NEAR THE MOUTH

LAT. 61D 44M 22S LONG. 121D 13M 9S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-02-04	1200	1	1.0	12.6	340.	376.	7.7	7.6	--	1.6
83-03-25	1100	1	1.0	24.3	370.	404.	--	7.7	--	1.5
83-06-17	0915	1	16.0	18.4	195.	205.	8.6	8.1	--	110.0
83-07-29	0845	1	19.0	26.9	230.	255.	7.8	8.2	--	64.0
83-09-07	0930	1	11.0	18.4	245.	261.	8.5	8.3	--	14.0
83-10-12	1000	1	3.0	18.4	250.	282.	8.0	8.1	--	5.7
83-11-25	1130	1	0	5.5	400	385.	7.8	7.9	--	1.2

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-02-04	1200	1	5	1.	--	--	--	--	--	--
83-03-25	1100	1	10	L1.	--	--	--	--	--	--
83-06-17	0915	1	30	235.	--	--	--	--	--	--
83-07-29	0845	1	10	118.	--	--	--	--	--	--
83-09-07	0930	1	L5	12	--	--	--	--	--	--
83-10-12	1000	1	L5	9.	--	--	--	--	--	--
83-11-25	1130	1	L5	3.	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-02-04	1200	1	0.	.0	207	170.0	56.2	16.6	208.7	4.2
83-03-25	1100	1	0.	.0	213.	175.0	57.5	16.7	212.3	4.3
83-06-17	0915	1	0.	.0	104	85.0	29.0	7.2	102.1	1.8
83-07-29	0845	1	0.	.0	128.	105.0	35.8	9.3	127.7	1.7
83-09-07	0930	1	0.	.0	128.	105.0	37.3	10.1	134.7	2.0
83-10-12	1000	1	0.	.0	140.	115.0	40.0	10.5	143.1	2.5
83-11-25	1130	1	0.	.0	205.	168.0 06L	58.1	15.6	209.3	4.1

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-02-04	1200	1	.9	3.0	.09	40.	7.0	230.	--	--
83-03-25	1100	1	.9	3.3	.06	42.	7.0	237	--	--
83-06-17	0915	1	.7	.8	.07	22.	4.8	117.	--	--
83-07-29	0845	1	.6	.6	L.05	25	4.7	141	--	--
83-09-07	0930	1	.5	.8	.07	28.	5.2	147	--	--
83-10-12	1000	1	.6	1.1	.06	30.	5.6	159.	--	--
83-11-25	1130	1	.9	2.7	.11 08L	43.	5.8 02L	231.	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-02-04	1200	1	.004	L.003 03L	Q.001	--	--	.17	L.01	Q.18
83-03-25	1100	1	.004	L.003 03L	Q.001	--	--	.17	L.01	Q.18
83-06-17	0915	1	.230	.011 03L	.219	--	--	.17	.35	.52
83-07-29	0845	1	.160	.003 03L	.157	--	--	07	.24	.31
83-09-07	0930	1	.038	L.003 03L	Q.035	--	--	10	.03	.13
83-10-12	1000	1	.037	.005 03L	.032	--	--	.12	L.01	Q.12
83-11-25	1130	1	.018	L.003 03L	Q.015	--	--	.14	L.01	Q.15

STATION - 00NW10ED0002
LIARD RIVER NEAR THE MOUTH

LAT. 61D 44M 22S LONG. 121D 13M 9S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-02-04	1200	1	.13	--	3.4	.09	3.5	.05 05L	L.0005 04L	.0008 02L
83-03-25	1100	1	.13	--	1.8	.06	1.9	.22 05L	L.0005 04L	L.0005 02L
83-06-17	0915	1	.05	--	4.2	4.30	8.5	.06 05L	L.0005 04L	L.0005 02L
83-07-29	0845	1	L.01	--	2.3	1.90	4.2	.04 05L	.0005 08L	.0005 08L
83-09-07	0930	1	.03	--	2.0	.31	2.3	.03 05L	.0029 08L	.0005 08L
83-10-12	1000	1	.04	--	2.6	.27	2.9	--	.0019 08L	.0003 08L
83-11-25	1130	1	.09	--	2.5	.20	2.7	--	.0010 08L	.0006 08L

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-02-04	1200	1	--	--	L.01	--	.09	--	--	L.001
83-03-25	1100	1	--	--	L.01	--	.10	--	--	L.001
83-06-17	0915	1	--	--	L.01	--	2.70	--	--	.010
83-07-29	0845	1	--	--	.07	--	2.00	--	--	.005
83-09-07	0930	1	--	--	--	--	--	--	--	.002 02P
83-10-12	1000	1	--	--	.01	--	.25	--	--	.001 02P
83-11-25	1130	1	--	--	L.02	--	.28	--	--	.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-02-04	1200	1	--	L.002	L.002	.038	.007	L.001	.09	L.004
83-03-25	1100	1	--	L.002	L.002	L.001	--	L.001	.07	L.004
83-06-17	0915	1	--	.002	.010	.011	.024	L.001	.09	L.004
83-07-29	0845	1	--	L.002	.006	.007	.021	L.001	.15	L.004
83-09-07	0930	1	--	.002 02P	.002 02P	.004 05P	.013 05P	L.001 02P	L.10 01P	L.001 02P
83-10-12	1000	1	--	L.001 02P	.002 02P	.005 05P	.039 05P	L.001 02P	.17 01P	L.001 02P
83-11-25	1130	1	--	L.001 02P	.003 02P	.005 05P	.004 05P	L.001 02P	L.10 01P	L.001 02P

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
NORTHWEST TERRITORIES

STATION - 00NW10FB0001
MACKENZIE RIVER NEAR FORT PROVIDENCE. NORTHWEST TERRITORIES LAT. 61D 15M 2S LONG. 118D 3M 0S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-02-08	1415	1	.0	14.5	--	315.	7.8	7.7	--	2.5
83-05-25	1420	1	11.0	22.0	--	255.	8.4	8.0	--	12.0
83-07-07	1050	1	17.0	22.1	--	256.	8.5	8.4	--	12.0
83-08-09	1330	1	21.0	23.6	200.	234.	8.8	8.7	--	6.7
83-11-17	1425	1	.0	18.9	225.	264.	--	7.8	--	7.8

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-02-08	1415	1	20.	3.	--	--	--	--	--	--
83-05-25	1420	1	30.	11.	--	--	--	--	--	--
83-07-07	1050	1	30.	11.	--	--	--	--	--	--
83-08-09	1330	1	20.	6.	--	--	--	--	--	--
83-11-17	1425	1	30.	3.	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-02-08	1415	1	0.	.0	152.	125.0	43.3	9.2	146.0	7.4
83-05-25	1420	1	0.	.0	108.	89.0	34.0	7.8	117.0	5.7
83-07-07	1050	1	1.	.5	117.	97.0	35.6	7.8	121.0	5.4
83-08-09	1330	1	4.	3.1	100.	88.0	32.1	7.2	109.8	5.7
83-11-17	1425	1	0.	.0	118.	97.0 06L	37.9	7.6	125.9	6.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-02-08	1415	1	1.8	4.4	.09	28.	5.4	175.	--	--
83-05-25	1420	1	1.5	4.5	L.05	26.	3.8	137.	--	--
83-07-07	1050	1	1.4	3.3	.12	22.	3.5	137.	--	--
83-08-09	1330	1	1.2	4.3	.15	23.	3.2	130.	--	--
83-11-17	1425	1	1.5	4.5	.09 08L	28.	2.7 02L	147.	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-02-08	1415	1	.011	.007 03L	.004	--	--	.41	.08	.49
83-05-25	1420	1	.031	.014 03L	.017	--	--	.36	.04	.40
83-07-07	1050	1	.021	.009 03L	.012	--	--	.33	.05	.38
83-08-09	1330	1	.027	.012 03L	.015	--	--	.27	.03	.30
83-11-17	1425	1	.018	.007 03L	.011	--	--	.33	.07	.40

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-02-08	1415	1	.08	--	13.0	.50	13.5	.09 05L	L.0005 04L	L.0005 02L
83-05-25	1420	1	.01	--	11.0	.32	11.3	.07 05L	L.0005 04L	L.0005 02L
83-07-07	1050	1	.03	--	11.0	.26	11.3	.07 05L	.0005 04L	L.0005 02L
83-08-09	1330	1	.01	--	9.2	.19	9.4	.06 05L	.0005 08L	L.0005 08L
83-11-17	1425	1	.04	--	8.9	.42	9.3	--	.0015 08L	.0002 08L

STATION - **OONN10FB0001**
MACKENZIE RIVER NEAR FORT PROVIDENCE, NORTHWEST TERRITORIES LAT 61D 15M 2S LONG 118D 3M 0S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-02-08	1415	1	--	--	L .01	--	11	--	--	L .001
83-05-25	1420	1	--	--	.02	--	27	--	--	L .001
83-07-07	1050	1	--	--	.02	--	.22	--	--	.001
83-08-09	1330	1	--	--	--	--	--	--	--	.001 02P
83-11-17	1425	1	--	--	L .02	--	31	--	--	.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-02-08	1415	1	--	L .002	L .002	.006	.016	L .001	.05	L .004
83-05-25	1420	1	--	L .002	.002	.002	.002	L .001	L .05	L .004
83-07-07	1050	1	--	L .002	L .002	.002	.003	L .001	.05	L .004
83-08-09	1330	1	--	L .002 02P	L .002 02P	.002 05P	.007 05P	L .001 02P	.07 01P	L .004 02P
83-11-17	1425	1	--	L .001 02P	.003 02P	.006 05P	.017 05P	L .001 02P	L .10 01P	L .001 02P

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
NORTHWEST TERRITORIES

STATION - 00NM10JA0001
CAMSELL RIVER AT OUTLET OF CLUT LAKE. NORTHWEST TERRITORIES LAT. 65D 35M 44S LONG. 117D 45M 20S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-03-07 1455 1	.0	18.4	--	138.	7.6	7.6	--	.2

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-03-07 1455 1	10.	L1.	--	--	--	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-03-07 1455 1	0.	.0	66.	54.0	15.4	6.8	66.4	2.5

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-03-07 1455 1	1.3	2.5	08	12.	1.6	75.	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-03-07 1455 1	.003	L.003 03L	Q.000	--	--	.19	L.01	Q.20

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-03-07 1455 1	.05	--	3.4	.08	3.5	.02 05L	L.0005 04L	L.0005 02L

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-03-07 1455 1	--	--	L.01	--	L.04	--	--	L.001

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-03-07 1455 1	--	L.002	L.002	L.001	--	L.001	L.05	L.004

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00MN10JC0001 LAT. 65D 8M 8S LONG. 123D 30M 50S
GREAT BEAR RIVER AT OUTLET OF GREAT BEAR LAKE

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-03-07	1045		1	.0	18.0	--	173	7.5	7.8	--	.3
83-06-27	1325		1	.0	21.3	164	173	7.9	8.0	--	.2
83-11-16	1055		1	0	14.6	--	158	--	7.8	--	.4

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101M OXYGEN DISSOLVED DO O2 MG/L
83-03-07	1045		1	10	L1	--	--	--	--	--	--
83-06-27	1325		1	L5	L1	--	--	--	--	--	--
83-11-16	1055		1	L5	L1	--	--	--	--	--	--

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-03-07	1045		1	0	0	78	64.0	18.7	8.0	79.6	4.8
83-06-27	1325		1	0	0	72	59.0	17.3	7.7	74.9	4.0
83-11-16	1055		1	0	0	68	56.0 08L	17.0	6.9	70.9	4.0

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-03-07	1045		1	1.1	5.6	05	15	3.0	96	--	--
83-06-27	1325		1	.7	5.5	06	15	2.8	88	--	--
83-11-16	1055		1	.7	5.0	.09 08L	18	2.5 02L	88	--	--

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07851L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-03-07	1045		1	L.003	L.003 03L	Q.000	--	--	26	L.01	Q.27
83-06-27	1325		1	.010	L.003 03L	Q.007	--	--	.23	L.01	Q.24
83-11-16	1055		1	.009	.004 03L	.005	--	--	.25	L.01	Q.26

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-03-07	1045		1	.20	--	1.7	.10	1.8	L.02 05L	L.0005 04L	L.0005 02L
83-06-27	1325		1	.14	--	2.1	.05	2.2	.02 05L	L.0005 04L	L.0005 02L
83-11-16	1055		1	.16	--	1.4	.04	1.4	--	.0015 08L	L.0001 08L

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-03-07	1045		1	--	--	L.01	--	L.04	--	--	L.001
83-06-27	1325		1	--	--	L.01	--	L.04	--	--	.001
83-11-16	1055		1	--	--	L.02	--	.05	--	--	L.001 02P

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-03-07	1045		1	--	L.002	L.002	.002	--	L.001	L.05	L.004
83-06-27	1325		1	--	L.002	L.002	.001	.003	L.001	L.05	L.004
83-11-16	1055		1	--	L.001 02P	.001 02P	.007 05P	.005 05P	L.001 02P	L.10 01P	L.001 02P

DETAILED WATER QUALITY 1983
NORTHWEST TERRITORIES

STATION - 10MN10KA0001
MACKENZIE RIVER AT NORMAN WELLS, NORTHWEST TERRITORIES LAT. 65D 18M 54S LONG. 126D 50M 57S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-02-14	1530	1	.0	19.0	--	214.	7.6	7.8	--	.9
83-06-04	1330	1	10.0	19.8	--	187.	--	8.1	--	230.0
83-11-20	1530	1	.0	13.9	210.	224.	8.2	8.0	--	1.6

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101H OXYGEN DISSOLVED BD O2 MG/L
83-02-14	1530	1	5.	1.	--	--	--	--	--	--
83-06-04	1330	1	50.	434.	--	--	--	--	--	--
83-11-20	1530	1	15.	1.	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-02-14	1530	1	0.	.0	87.	71.0	22.6	8.4	91.0	6.5
83-06-04	1330	1	0.	.0	90.	74.0	22.0	5.5	77.6	3.7
83-11-20	1530	1	0.	.0	94.	77.0 06L	26.9	7.7	98.9	7.8

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-02-14	1530	1	1.0	9.7	L.05	22.	3.2	116.	--	--
83-06-04	1330	1	.8	3.6	.07	14.	2.3	96.	--	--
83-11-20	1530	1	.9	9.7	.10 08L	23.	2.7 02L	124.	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-02-14	1530	1	.008	.005 03L	.003	--	--	.30	L.01	0.31
83-06-04	1330	1	.310	.013 03L	.297	--	--	.21	.72	.93
83-11-20	1530	1	.005	.004 03L	.001	--	--	.18	L.01	0.19

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-02-14	1530	1	.18	--	2.6	.05	2.7	.04 05L	L.0005 04L	L.0005 02L
83-06-04	1330	1	.04	--	5.7	6.80	12.5	.04 05L	L.0005 04L	L.0005 02L
83-11-20	1530	1	.12	--	2.7	.05	2.8	--	.0007 08L	.0001 08L

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-02-14	1530	1	--	--	L.01	--	L.04	--	--	L.001
83-06-04	1330	1	--	--	.20	--	3.40	--	--	.027
83-11-20	1530	1	--	--	L.02	--	.15	--	--	L.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-02-14	1530	1	--	L.002	L.002	.001	.005	L.001	L.05	L.004
83-06-04	1330	1	--	.004	.021	.018	.059	L.001	.14	.005
83-11-20	1530	1	--	L.001 02P	.002 02P	.009 05P	.004 05P	L.001 02P	L.10 01P	L.001 02P

STATION - [redacted]
MACKENZIE RIVER ABOVE ARCTIC RED RIVER NORTHWEST TERRITORIES LAT. 67D 21M 29S LONG. 133D 33M 29S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-28	1330	1	0	15.9	--	302.	7.3	7.8	--	4.3
83-03-23	1430	1	.0	18.6	282.	303.	--	7.8	--	3.5
83-05-04	1310	1	0	18.8	--	338.	7.5	7.7	--	5.9
83-07-05	1530	1	19.0	20.4	244.	239.	--	8.0	--	180.0
83-07-23	1115	1	18.5	22.5	300.	258.	7.6	8.1	--	70.0
83-08-31	1040	1	14.0	20.3	263.	273.	--	8.	--	30.0
83-10-04	1005	1	2.0	17.9	230.	275.	8.2	8.	--	12.0
83-11-18	1400	1	0	13.9	207.	276.	7.6	7.9	--	--
83-12-29	1215	459	0	13.5	282	305.	7.2	7.7	--	4.3

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-28	1330	1	L5	8.	--	--	--	--	--	--
83-03-23	1430	1	10	5.	--	--	--	--	--	--
83-05-04	1310	1	5.	22	--	--	--	--	--	--
83-07-05	1530	1	50.	396.	--	--	--	--	--	--
83-07-23	1115	1	10.	106.	--	--	--	--	--	--
83-08-31	1040	1	5.	56.	--	--	--	--	--	--
83-10-04	1005	1	5.	16.	--	--	--	--	--	--
83-11-18	1400	1	10.	112.	--	--	--	--	--	--
83-12-29	1215	459	10.	--	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-28	1330	1	0.	.0	128.	105.0	37.4	9.7	133.3	12.0
83-03-23	1430	1	0.	.0	122.	100.0	37.9	10.0	135.8	12.0
83-05-04	1310	1	0.	.0	117.	96.0	38.0	9.5	134.0	12.0
83-07-05	1530	1	0.	.0	106.	87.0	30.9	7.7	108.9	5.2
83-07-23	1115	1	0.	.0	105.	86.0	32.8	8.5	116.9	6.1
83-08-31	1040	1	0.	.0	115.	94.0	35.8	9.5	128.5	6.9
83-10-04	1005	1	0.	.0	112	92.0	32.8	7.8	114.0	8.6
83-11-18	1400	1	0.	.0	110.	90.0 06L	35.9	8.6	125.0	10.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-28	1330	1	1.1	14.0	.09	34.	4.3	176.	--	--
83-03-23	1430	1	1.1	15.0	L.05	34	4.2	174.	--	--
83-05-04	1310	1	1.1	15.0	.06	34	4.4	172.	--	--
83-07-05	1530	1	.8	5.1	.11	28.	3.8	134	--	--
83-07-23	1115	1	9	6.6	.08	28.	3.4	138.	--	--
83-08-31	1040	1	.8	7.8	.08	33.	3.6	154.	--	--
83-10-04	1005	1	1.8	8.6	L.05	31	3.4	150.	--	--
83-11-18	1400	1	1.1	10.9	.09 08L	39.	3.5 02L	163.	--	--

ATIO [redacted]
MACKENZIE RI [redacted] ABOVE ARCTIC RED RIVER NORTHWEST TERRITORIES LAT. 67D 21M 29S LONG. 133D 33M 29S

83-07-05	1530	1	420	.025 03L	.395	--	--	.18	.65	.83
83-07-23	1115	1	085	.003 03L	.082	--	--	.13	.15	.28
83-08-31	1040	1	039	.004 03L	.035	--	--	.66	.12	.78
83-10-04	1005	1	031	.003 03L	028	--	--	.18	.05	.23
83-11-18	1400	1	074	.004 03L	.070	--	--	.18	.24	.42
83-12-29	1215	459	--	.004 03L	--	--	--	.30	--	--

DETAILED WATER QUALITY 1983
NORTHWEST TERRITORIES

STATION - 00NN10LA0003
MACKENZIE RIVER ABOVE ARCTIC RED RIVER NORTHWEST TERRITORIES LAT. 67D 21M 28S LONG. 133D 33M 29S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-28	1330	1	.17	--	3.9	.27	4.2	.04 05L	L.0005 04L	L.0005 02L
83-03-23	1430	1	.18	--	3.5	.18	3.7	.15 05L	L.0005 04L	L.0005 02L
83-05-04	1310	1	.13	--	3.8	.57	4.2	.04 05L	L.0005 04L	L.0005 02L
83-07-06	1530	1	.06	--	5.2	5.90	11.1	.06 05L	L.0005 04L	.0005 02L
83-07-23	1115	1	.03	--	3.5	1.40	4.9	.06 05L	L.0005 08L	L.0005 08L
83-08-31	1040	1	.05	--	2.7	.91	3.6	.04 05L	.0008 08L	.0002 08L
83-10-04	1005	1	.04	--	3.4	.34	3.7	--	.0011 08L	.0003 08L
83-11-18	1400	1	.09	--	3.6	4.80	8.4	--	.0007 08L	.0002 08L
83-12-29	1215	459	.14	--	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-28	1330	1	--	--	L.01	--	.13	--	--	L.001
83-03-23	1430	1	--	--	L.01	--	.29	--	--	L.001
83-05-04	1310	1	--	--	.02	--	.35	--	--	L.001
83-07-06	1530	1	--	--	.19	--	4.00	--	--	.014
83-08-31	1040	1	--	--	--	--	--	--	--	.004 02P
83-10-04	1005	1	--	--	.02	--	.40	--	--	.001 02P
83-11-18	1400	1	--	--	.08	--	2.90	--	--	.005 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-28	1330	1	--	L.002	L.002	.002	.004	L.001	L.05	L.004
83-03-23	1430	1	--	L.002	L.002	.006	--	L.001	.06	L.004
83-05-04	1310	1	--	L.002	L.002	.002	.005	L.001	.05	L.004
83-07-06	1530	1	--	.005	.029	.017	.059	L.001	25	.004
83-08-31	1040	1	--	L.001 02P	.004 02P	.004 05P	.012 05P	L.001 02P	L.10 01P	L.001 02P
83-10-04	1005	1	--	L.001 02P	.003 02P	.003 05P	L.001 05P	L.001 02P	.18 01P	L.001 02P
83-11-18	1400	1	--	.002 02P	.009 02P	.009 05P	.034 05P	L.001 02P	L.10 01P	.003 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97354L COMPOSITE SAMPLE DESCRIPTIVE CODE	06152L CARBON DISSOLVED INORGANIC C MG/L
83-12-29	1215	459	--	12.0

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 09NN10MC0001 LAT. 67D 13M 14S LONG. 134D 58M 44S
PEEL RIVER ABOVE FORT MCPHERSON. NORTHWEST TERRITORIES

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-02-16	1200	1	.0	21.2	--	384.	7.6	7.7	--	.8
83-03-23	1245	1	0	18.0	340	374.	7.6	7.8	--	1.2
83-05-04	1130	1	.0	18.8	--	361.	8.2	7.8	--	20.0
83-07-23	1330	1	18.0	22.3	--	344.	--	8.2	--	23.0
83-10-04	1430	1	.5	17.7	329.	369.	--	8.0	--	35.0
83-11-18	1300	1	--	14.5	357	406.	7.5	7.8	--	1.5

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED 00 02 MG/L
83-02-16	1200	1	10	1	--	--	--	--	--	--
83-03-23	1245	1	5	2	--	--	--	--	--	--
83-05-04	1130	1	5	42.	--	--	--	--	--	--
83-07-23	1330	1	10.	46.	--	--	--	--	--	--
83-10-04	1430	1	10	51.	--	--	--	--	--	--
83-11-18	1300	1	5	41.	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-02-16	1200	1	0.	.0	183.	150.0	52.9	16.9	201.7	4.8
83-03-23	1245	1	0.	.0	183.	150.0	52.0	16.6	198.2	4.8
83-05-04	1130	1	0.	.0	185.	135.0	49.9	17.5	196.6	6.2
83-07-23	1330	1	0.	.0	152.	125.0	45.7	14.6	174.2	3.7
83-10-04	1430	1	0.	.0	146.	120.0	46.5	14.4	175.4	6.1
83-11-18	1300	1	0.	.0	135.	111.0 08L	40.1	16.5	168.1	5.5

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-02-16	1200	1	.5	4.0	.06	48	4.4	222.	--	--
83-03-23	1245	1	.6	4.2	.07	48	4.2	220	--	--
83-05-04	1130	1	.9	4.2	.06	60	3.6	223.	--	--
83-07-23	1330	1	.6	2.1	.07	44	3.4	189.	--	--
83-10-04	1430	1	.7	2.2	.06	67.	3.2	212.	--	--
83-11-18	1300	1	.6	2.8	.07 08L	64	3.7 02L	200.	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-02-16	1200	1	.008	L.003 03L	Q.005	--	--	.26	07	.33
83-03-23	1245	1	.007	L.003 03L	Q.004	--	--	.20	L.01	Q.21
83-05-04	1130	1	.032	.003 03L	.029	--	--	.21	.09	.30
83-07-23	1330	1	.039	.006 03L	.033	--	--	.11	.09	.20
83-10-04	1430	1	.072	.003 03L	.069	--	--	.19	.11	.30
83-11-18	1300	1	.005	--	--	--	--	.17	L.01	Q.18

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-02-16	1200	1	.19	--	1.2	.21	1.4	.02 05L	L.0005 04L	.0007 02L
83-03-23	1245	1	.14	--	3.6	.08	3.7	.05 05L	L.0005 04L	L.0005 02L
83-05-04	1130	1	.19	--	1.2	.68	1.9	.08 05L	L.0005 04L	L.0005 02L
83-07-23	1330	1	.06	--	1.8	.81	2.6	.04 05L	L.0005 08L	.0005 08L
83-10-04	1430	1	.09	--	2.8	1.00	3.8	--	.0008 08L	.0006 08L
83-11-18	1300	1	.14	--	--	.05	--	--	.0006 08L	.0006 08L

DETAILED WATER QUALITY 1983
NORTHWEST TERRITORIES

STATION - 00NW10MC0001
PEEL RIVER ABOVE FORT MCPHERSON. NORTHWEST TERRITORIES LAT. 67D 13M 14S LONG. 134D 58M 44S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-02-16	1200	1	--	--	L .01	--	L .04	--	--	L .001
83-03-23	1245	1	--	--	.01	--	.19	--	--	L .001
83-05-04	1130	1	--	--	.02	--	.55	--	--	.001
83-07-23	1330	1	--	--	.04	--	1.10	--	--	005
83-10-04	1430	1	--	--	.04	--	1.50	--	--	005 02P
83-11-16	1300	1	--	--	.02	--	.07	--	--	001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-02-16	1200	1	--	L .002	L .002	.002	.002	L .001	.07	L .004
83-03-23	1245	1	--	L .002	L .002	.002	--	L .001	.07	L .004
83-05-04	1130	1	--	L .002	L .002	.004	.016	L .001	.07	L .004
83-07-23	1330	1	--	L .002	.004	.005	.016	L .001	.14	L .004
83-10-04	1430	1	--	L .001 02P	.005 02P	.005 05P	.013 05P	L .001 02P	.22 01P	.001 02P
83-11-16	1300	1	--	L .001 02P	.002 02P	.002 05P	.008 05P	L .001 02P	L .10 01P	L .001 02P

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00NN10PB0001
COPPERMINE RIVER AT OUTLET OF POINT LAKE, NORTHWEST TERRITORIES LAT 65D 25M 05S LONG 114D 04M 29S

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG C	02061L TEMP. WATER DEG C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-03-09 1850	1	0	19.6	--	14	--	6.7	--	4

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR MG/L	10501L RESIDUE FIXED NONFILTR MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-03-09 1850	1	20	5 01R	--	--	--	--	--	--

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-03-09 1850	1	0	0	4	3.0	1.0	5	4.6	7

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-03-09 1850	1	5	4	L 05	1	L 1	98	--	--

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-03-09 1850	1	100	004 03L	096	--	--	16 51R	L 01 02R	0.17

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-03-09 1850	1	06 10R	--	2 1 04R	16 02R	2.3	03 05L	L 0005 04L	L 0005 02L

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-03-09 1850	1	--	--	L 01 04W	--	L 04 04W	--	--	L 001 20W

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-03-09 1850	1	--	L 002 20W	L 002 20W	001 20W	--	L 001 20W	L 05 20W	L 004 20W

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
NORTHWEST TERRITORIES

STATION - 0CNN10QA0001
TREE RIVER NEAR THE MOUTH

LAT. 67D 38M 8S LONG. 111D 53M 30S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. US/E/CM	02041L SPECIFIC CONDUCT. US/E/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-03-09 1445 1	.0	19.3	--	98.	--	7.8	--	.9

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-03-09 1445 1	20	15.	--	--	--	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-03-09 1445 1	0.	.0	52.	43.0	10.0	5.4	47.2	1.6

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-03-09 1445 1	.5	3.2	L.05	2.	1.6	50.	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-03-09 1445 1	--	.005 03L	--	--	--	.13	.03	.16

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-03-08 1445 1	.06	--	1.3	.18	1.5	L.02 05L	L.0005 04L	L.0005 02L

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-03-09 1445 1	--	--	L.01	--	.32	--	--	.001

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-03-08 1445 1	--	L.002	L.002	.003	--	L.001	L.05	L.004

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - GONN10RC0001
BACK RIVER BELOW DEEP ROSE LAKE, NORTHWEST TERRITORIES LAT. 68D 4M 59S LONG. 98D 30M 05

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-02-21 1100 1	.0	19.0	--	25	--	6.8	--	1.8

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	08717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF MO/DL	36012F COLIFORMS FECAL MF MO/DL	36103F FECAL STREP. MF MO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-02-21 1100 1	10.	2	--	--	--	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	08201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-02-21 1100 1	0.	0	6	5.3	1.5	1.0	7.9	6

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06804P CYANIDE TOTAL CN MG/L
83-02-21 1100 1	.5	.8	L .05	2	L .1	09	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-02-21 1100 1	--	004 03L	--	--	--	18	.03	.21

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-02-21 1100 1	05	--	2.5	16	2.7	02 05L	L .0005 04L	L .0005 02L

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-02-21 1100 1	--	--	L .01	--	L .04	--	--	L .001

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-02-21 1100 1	--	L .002	L .002	.001	--	L .001	L .05	L .004

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
NORTHWEST TERRITORIES

STATION - 01NN08MA0001
BAKER LAKE AT BAKER LAKE

LAT 64D 19M 9S LONG. 96D 1M 49S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C	02061L TEMP. WATER DEG. C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-03-03 1500 1	.0	19.4	--	31.	--	6.5	--	1.5

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RES'DUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-03-03 1500 1	10	L1	--	--	--	--	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-03-03 1500 1	0.	0	11	8.8	2.8	1.3	12.3	9

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-03-03 1500 1	6	2.3	L.05	1	L.1	Q14	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-03-03 1500 1	--	016 03L	--	--	--	25	08	.33

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-03-03 1500 1	08	--	2.8	.39	3.2	L.02 05L	L.0005 04L	L.0005 02L

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-03-03 1500 1	--	--	L.01	--	L.04	--	--	L.001

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-03-03 1500 1	--	L.002	L.002	.005	--	L.001	L.05	L.004

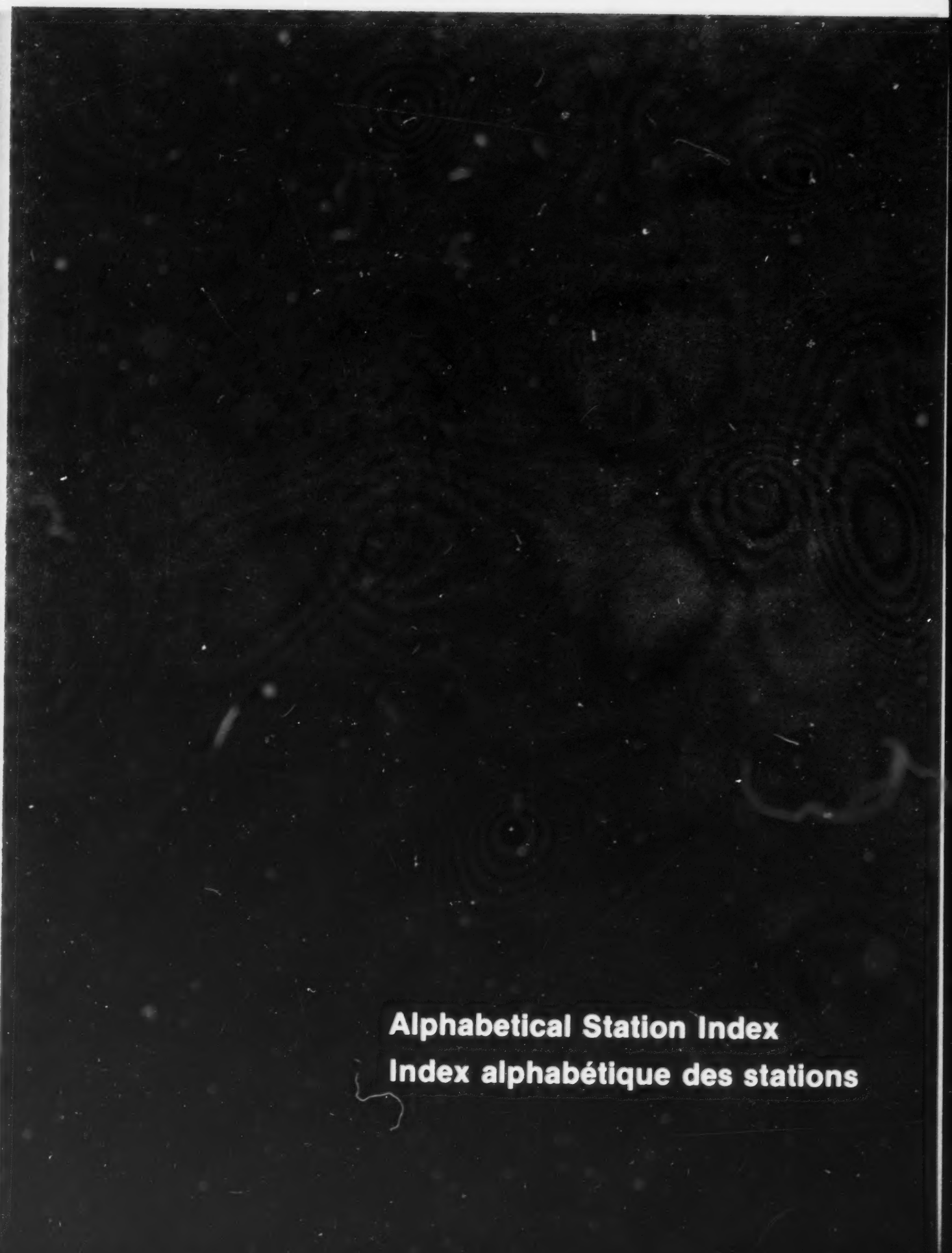
DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18300P PHORATE UG/L	18310P ETHION UG/L	18320P CARBO-PHENOTHION UG/L	92111P URANIUM DISSOLVED U UG/L	88502P RADIUM RADIATION RA-228 BQ/L	01502P TRITIUM RADIATION H-3 BQ/L	51501P ANTIMONY RADIATION SB-125 BQ/L	55502P CESIUM RADIATION CS-137 BQ/L
83-01-31 1200 7	--	--	--	.29	.0026	9.10	L.0073	L.0042

STATION - 01NN08MA0001
BAKER LAKE AT BAKER LAKE

LAT 64D 19M 9S LONG 96D 1M 49S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97354L COMPOSITE SAMPLE DESCRIPTIVE CODE	06152L CARBON DISSOLVED INORGANIC C MG/L
83-01-31	1200	7	1	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE



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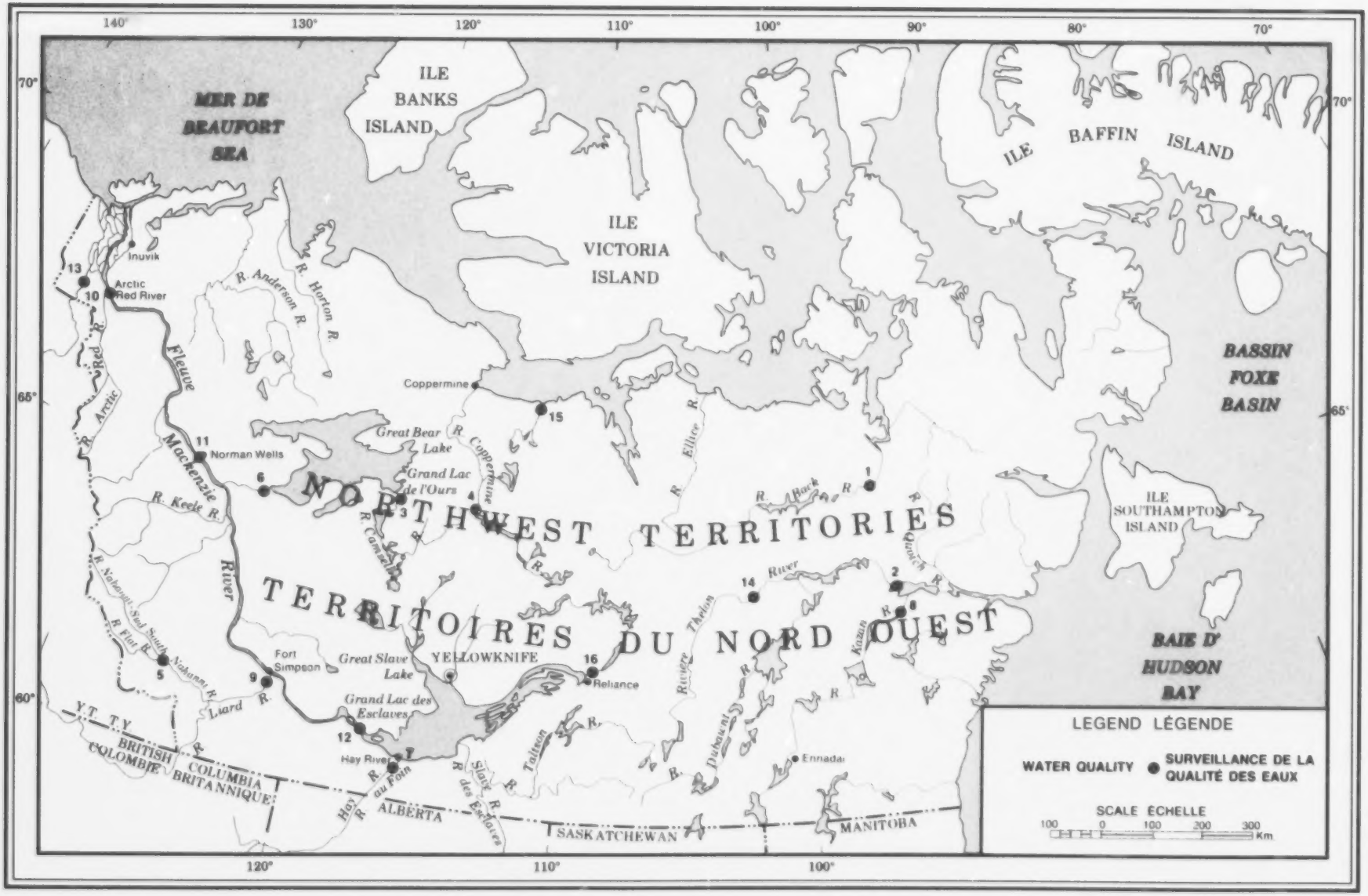
WATER QUALITY STATIONS: ALPHABETICAL INDEX

NORTHWEST TERRITORIES

Location Description	Station Number	Latitude D	M	S	Longitude D	M	S	Page Number	Map Number
BACK RIVER BELOW DEEP ROSE LAKE, NORTHWEST TERRITORIES	00NW10RC0001 97900S 001	66	4	59	96	30	0	161	1
BAKER LAKE AT BAKER LAKE	01NW08MA0001 97900S 001	64	19	9	96	1	49	162	2
CAMSELL RIVER AT OUTLET OF CLUT LAKE, NORTHWEST TERRITORIES	00NW10JA0001 97900S 002	65	35	44	117	45	20	152	3
COPPERMINE RIVER AT OUTLET OF POINT LAKE, NORTHWEST TERRITORIES	00NW10PB0001 97900S 001	65	25	0	114	0	29	159	4
FLAT RIVER NEAR THE MOUTH	00NW10EA0004 97900S 003	61	31	59	125	24	20	147	5
GREAT BEAR RIVER AT OUTLET OF GREAT BEAR LAKE	00NW10JC0001 97900S 003	65	8	8	123	30	50	153	6
HAY RIVER NEAR HAY RIVER NORTHWEST TERRITORIES	00NW07DB0001 97900S 001	60	44	44	115	51	20	143	7
KAZAN RIVER ABOVE KAZAN FALLS, NORTHWEST TERRITORIES	00NW06LC0001 97900S 001	63	38	58	95	51	15	142	8
LIARD RIVER NEAR THE MOUTH	00NW10ED0002 97900S 002	61	44	22	121	13	9	148	9
LOCKHART RIVER AT OUTLET OF ARTILLERY LAKE	00NW07RD0001 97900S 001	62	53	20	108	28	18	145	16
MACKENZIE RIVER ABOVE ARCTIC RED RIVER NORTHWEST TERRITORIES	00NW10LA0003 97900S 001	67	21	29	133	33	29	155	10
MACKENZIE RIVER AT NORMAN WELLS, NORTHWEST TERRITORIES	00NW10KA0001 97900S 001	65	16	54	126	50	57	154	11
MACKENZIE RIVER NEAR FORT PROVIDENCE, NORTHWEST TERRITORIES	00NW10FB0001 97900S 002	61	15	2	118	3	0	150	12
PEEL RIVER ABOVE FORT MCPHERSON, NORTHWEST TERRITORIES	00NW10MC0001 97900S 002	67	13	14	134	56	44	157	13
THELON RIVER ABOVE BEVERLY LAKE	00NW06JC0001 97900S 002	64	32	8	101	23	48	141	14
TREE RIVER NEAR THE MOUTH	00NW10QA0001 97900S 001	67	38	8	111	53	30	160	15

Station Location Map
Carte des stations



WATER QUALITY BRANCH MONITORING STATIONS 1983

STATIONS DE SURVEILLANCE DE LA DIRECTION DE LA QUALITÉ DES EAUX 1983

SASKATCHEWAN

Detailed Data / Données détaillées

STATION 05SA05FE0001
BATTLE RIVER NEAR UNWIN, SASKATCHEWAN

LAT 52D 58M 25S LONG 109D 52M 23S

DATE	TIME	SUB-ID	02061F TEMP WATER DEG C	02061L TEMP WATER DEG C	02041F SPECIFIC CONDUCT USIE/CM	02041L SPECIFIC CONDUCT USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-19	0900	462	0	21.9	906	859	7.6	7.5	5.9	5.3
83-02-23	0830	462	0	17.5	859	885	7.4	7.5	4.4	5.1
83-03-16	0845	462	2	19.4	922	909	7.4	7.5	8.0	--
83-04-20	0805	462	9.5	20.6	560	549	8.3	8.1	250.0	110.0
83-05-17	1744	462	13.0	23.7	545	558	8.3	7.9	162.0	115.0
83-06-07	1645	462	19.0	22.3	715	733	8.4	8.4	18.0	15.0
83-07-12	1750	462	22.0	12.8	540	542	7.8	7.8	340.0	170.0
83-08-16	1348	462	20.0	23.2	695	683	8.3	8.2	26.0	17.0
83-09-13	1840	462	13.0	18.4	785	772	8.5	8.4	20.0	5.7
83-10-11	1708	462	4.0	16.5	923	941	8.6	8.5	6.6	4.0
83-11-09	1700	462	1.0	18.2 61R	1027	1084 41R	8.4	8.3 01R	11.0	7.3 73R
83-12-13	1600	462	0	11.5	1130	1120	8.0	7.7	6.5	5.0

DATE	TIME	SUB-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR MG/L	10501L RESIDUE FIXED NONFILTR MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP MF NO/DL	08101M OXYGEN DISSOLVED BO O2 MG/L
83-01-19	0900	462	30	3	1	002	6	2	--	3.6
83-02-23	0830	462	30	19	14	001	2	L2	--	3.7
83-03-16	0845	462	40	5	2	005	12	2	--	8.2
83-04-20	0805	462	60	504	460	050	--	100	--	8.6
83-05-17	1744	462	80	260	228	050	80	30	--	8.4
83-06-07	1645	462	40	48	41	003	32	16	--	8.3
83-07-12	1750	462	140	510	425	020	120	50	--	4.9
83-08-16	1348	462	60	35	28	007	70	48	--	7.4
83-09-13	1840	462	40	10	8	007	40	32	--	10.5
83-10-11	1708	462	40	5	3	004	12	6	--	12.4
83-11-09	1700	462	50 21R	4 01R	2 01R	006 171	16 02U	10 12U	--	13.0
83-12-13	1600	462	40	4	3	L 001	L2	L2	--	7.0

DATE	TIME	SUB-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-19	0900	462	0	0	457	375.0	76.2	30.0	313.8	90.0
83-02-23	0830	462	0	0	463	380.0	74.0	29.9	307.9	95.0
83-03-16	0845	462	0	0	462	379.0	72.5	29.9	304.1	100.0
83-04-20	0805	462	0	0	286	235.0	45.3	18.3	188.5	54.0
83-05-17	1744	462	0	0	226	185.0	39.7	16.4	166.6	55.0
83-06-07	1645	462	3	2.3	324	270.0	50.6	21.7	215.7	75.0
83-07-12	1750	462	0	0	213	175.0	31.3	12.2	128.4	62.0
83-08-16	1348	462	0	0	311	255.0	51.2	20.4	211.8	69.0
83-09-13	1840	462	8	6.3	356	305.0	59.8	24.8	251.4	89.0
83-10-11	1708	462	9	7.1	434	370.0	58.8	29.5	268.3	120.0
83-11-09	1700	462	0	0 51R	417	342.0 06R	59.7 03R	32.0 02R	280.8	136.0 03R
83-12-13	1600	462	0	0	435	357.0 06L	83.7	36.8	360.5	132.0

DATE	TIME	SUB-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-19	0900	462	8.1	16.0	16	102	9.4	557	L1	.003
83-02-23	0830	462	7.7	17.0	20	108	11.0	571	L1	.005
83-03-16	0845	462	7.3	17.0	11	126	11.0	591	L1	.005
83-04-20	0805	462	9.1	8.2	18	60	10.0	346	--	.007
83-05-17	1744	462	9.8	8.3	.13	84	2.6	327	--	.004
83-06-07	1645	462	10.0	11.0	.21	102	7.4	440	--	.004
83-07-12	1750	462	8.3	7.0	.18	84	12.0	322	--	.009
83-08-16	1348	462	8.9	8.6	.21	91	12.0	414	--	.010
83-09-13	1840	462	8.5	14.0	.2	107	10.0	496	--	.004
83-10-11	1708	462	7.9	21.0	.23	132	7.8	599	--	.004
83-11-09	1700	462	7.5 03R	23.5 06R	.23 08L	172 06R	--	--	--	.003 04N
83-12-13	1600	462	9.0	22.2	.22 08L	177	9.5 02L	684	--	.004

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 00SA05FE0001
BATTLE RIVER NEAR UNWIN, SASKATCHEWAN

LAT 52D 58M 25S LONG 109D 52M 23S

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-19	0900		482	047	015	032	006	55	52	07	.59
83-02-23	0830		482	042	014	028	004	97	97	08	1.05
83-03-16	0845		482	043	019	024	L 003	89	90	10	1.00
83-04-20	0805		482	360	055	305	019	76	85	1.20	2.05
83-05-17	1744		482	330	024	306	L 003	60	63	95	1.58
83-06-07	1645		482	079	025	054	L 003	65	68	20	.86
83-07-12	1750		482	500	041	459	L 003	1.10	1.30	1.30	2.60
83-08-16	1348		482	120	057	063	035	79	.81	31	1.12
83-09-13	1840		482	059	019	040	L 003	70	70	16	.86
83-10-11	1708		482	035	017	018	L 003	63	62	02	.64
83-11-09	1700		482	074 06R	036 03V	038	015 56V	56 51V	56 51R	09 02R	.65
83-12-13	1600		482	043	025	018	L 003	63	62	08	.71

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) C MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-19	0900		482	20	4	12.0	45	12.5	27	L 0005	L 0005
83-02-23	0830		482	45	2	12.0	51	12.5	23 05L	L 0005	L 0005
83-03-16	0845		482	45	1	10.0	80	10.8	25	L 0005	L 0005
83-04-20	0805		482	17	L 1	12.0	11.00	23.0	16	0008	L 0005
83-05-17	1744		482	L 01	L 1	12.0	7.10	19.1	11	0008	L 0005
83-06-07	1645		482	L 01	L 1	12.0	1.40	13.4	02	0015	L 0005
83-07-12	1750		482	40	L 1	15.0	11.00	26.0	22	0016	L 0005
83-08-16	1348		482	L 01	L 1	4.4	2.20	6.6	21	0039 08D	0003 08D
83-09-13	1840		482	L 01	L 1	13.0	88	13.9	22	0031 08D	0002 08D
83-10-11	1708		482	L 01	L 1	11.0	34	11.3	28	0030 08D	L 0001 08D
83-11-09	1700		482	L 01 10R	L 1 06W	12.0 04R	56 02R	12.6	31 05V	0016 08V	0002 08V
83-12-13	1600		482	04	L 1	16.0	54	16.5	28	0021 08D	0001 08D
	1600		482	--	--	--	--	--	--	0021 08L	0001 08L

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-19	0900		482	15	--	--	04	--	08	L 02	L 001
83-02-23	0830		482	02	--	--	04	--	08	L 02	L 001
83-03-16	0845		482	08	--	--	03	--	15	L 02	L 001
83-04-20	0805		482	1.50	--	--	L 01	--	L 04	L 02	019
83-05-17	1744		482	89	--	--	L 01	--	L 04	02	--
83-06-07	1645		482	12	--	--	18	--	L 04	L 02	001
83-07-12	1750		482	1.80	--	--	14	--	30	06	030
83-08-16	1348		482	37	--	--	10	--	09	L 02	004 02P
83-09-13	1840		482	16	--	--	10	--	L 04	L 02	002 02P
83-10-11	1708		482	L 10	--	--	09	--	05	L 02	001 02P
83-11-09	1700		482	L 10 02W	--	--	11 04T	--	06 04T	L 02 11W	002 02W
83-12-13	1600		482	15	--	--	03	--	08	L 02	001 02P

DATE	TIME/ YMD/AMJ	HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-19	0900		482	L 015	L 002	L 002	003	001	L 001	13	L 004
83-02-23	0830		482	L 015	L 002	L 002	004	004	L 001	13	L 004
83-03-16	0845		482	L 015	L 002	L 002	004	--	L 001	08	005
83-04-20	0805		482	L 015	007	031	015	056	L 001	27	055
83-05-17	1744		482	L 015	003	019	011	026	L 001	12	005
83-06-07	1645		482	L 015	L 002	004	004	007	L 001	L 05	L 004
83-07-12	1750		482	L 015	007	030	013	054	L 001	23	009
83-08-16	1348		482	--	L 001 02P	007 02P	005 05P	004 05P	L 001 02P	10 01P	L 001 02P
83-09-13	1840		482	--	L 001 02P	005 02P	004 05P	002 05P	L 001 02P	L 10 01P	L 001 02P
83-10-11	1708		482	001 03P	L 001 02P	004 02P	003 05P	L 001 05P	L 001 02P	20 01P	001 02P
83-11-09	1700		482	001 03P	001 02W	002 02W	002 05P	001 05W	L 001 02W	10 01W	L 001 02W
83-12-13	1600		482	001 03P	L 001 02P	005 02P	004 05P	001 05P	L 001 02P	L 10 01P	L 001 02P

STATION - 00SA05FE0001
BATTLE RIVER NEAR UNWIN, SASKATCHEWAN

LAT 52D 56M 25S LONG 109D 52M 23S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-19	0900	462	002	L 001	003	L 001	L 001	L 002	L 001	L 001
83-02-23	0830	462	003	L 001	001	L 001	L 001	L 002	L 001	L 001
83-03-16	0845	462	003	L 001	001	L 001	L 001	L 002	L 001	L 001
83-04-20	0805	462	006	L 001	003	L 001	L 001	L 002	L 001	L 001
83-05-17	1744	462	007	L 001	003	002	L 001	L 002	L 001	L 001
83-06-07	1845	462	004	L 001	L 001	L 001	L 001	L 002	L 001	L 001
83-07-12	1750	462	006	L 001	002	003	L 001	L 002	L 001	L 001
83-08-16	1348	462	006	L 001	L 001	L 001	L 001	L 002	L 001	L 001
83-09-13	1840	462	v02	L 001	003	001	L 001	L 001	L 001	L 001
83-10-11	1708	462	003	L 001	009	001	L 001	L 002	L 001	L 001
83-11-08	1700	462	002 35W	L 001 11R	008 75R	001 70R	L 001 30R	L 002 10R	L 001 20R	L 001 05R
83-12-13	1800	462	--	L 001	004	001	L 001	L 002	L 001	L 001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-19	0900	462	L 004	L 01	L 002	L 001	L 003	L 001	L 002	L 002
83-02-23	0830	462	L 004	L 01	L 002	L 001	L 003	L 001	L 002	L 002
83-03-16	0845	462	L 004	L 01	L 002	L 001	L 003	L 001	L 002	L 002
83-04-20	0805	462	L 004	L 01	L 002	L 001	L 003	L 001	L 002	L 002
83-05-17	1744	462	L 004	L 01	L 002	L 001	L 003	L 001	L 002	L 002
83-06-07	1845	462	L 004	L 01	L 002	L 001	L 003	L 001	L 002	L 002
83-07-12	1750	462	L 004	L 01	L 002	L 001	L 003	L 001	L 002	L 002
83-08-16	1348	462 v	L 004	L 01	L 002	L 001	L 003	L 001	L 002	L 002
83-09-13	1840	462	L 004	L 01	L 002	L 001	L 003	L 001	L 002	L 002
83-10-11	1708	462	L 004	L 01	L 002	L 001	L 003	L 001	L 002	L 002
83-11-08	1700	462	L 004 00R	L 01 30R	L 002 40R	L 001 50R	L 003 55R	L 001 40R	L 002 45R	L 002 50R
83-12-13	1800	462	L 004	L 01	L 002	L 001	L 003	L 001	L 002	L 002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-19	0900	462	L 001	L 003	L 002	L 2	010	L 009	L 004	L 002
83-02-23	0830	462	L 001	L 003	L 002	L 2	009	L 009	L 004	L 002
83-03-16	0845	462	L 001	L 003	L 002	L 2	L 004	L 009	L 004	L 002
83-04-20	0805	462	L 001	L 003	L 002	L 2	030	L 009	L 004	L 002
83-05-17	1744	462	L 001	L 003	L 002	L 2	L 004	L 009	L 004	L 002
83-06-07	1845	462	L 001	L 003	L 002	L 2	L 004	L 009	L 004	L 002
83-07-12	1750	462	L 001	L 003	L 002	L 2	100	L 009	L 004	L 002
83-08-16	1348	462	L 001	L 003	L 002	L 2	L 004	L 009	L 004	L 002
83-09-13	1840	462	L 001	L 003	L 002	L 2	L 004	L 009	L 004	L 002
83-10-11	1708	462	L 001	L 003	L 002	L 2	007	L 009	L 004	L 002
83-11-08	1700	462	L 001 25R	L 003 60R	L 002 65R	L 2 20W	L 004 00W	L 009 50W	L 004 55W	L 002 10W
83-12-13	1800	462	L 001	L 003	L 002	L 2	L 004	L 009	L 004	L 002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-19	0900	462	L 004	--	L 002	L 002	L 005	L 002	--	--
83-02-23	0830	462	L 004	--	L 002	L 002	L 005	L 002	--	--
83-03-16	0845	462	L 004	--	L 002	L 002	L 005	L 002	--	--
83-04-20	0805	462	L 004	--	L 002	L 002	L 005	L 002	--	--
83-05-17	1744	462	L 004	--	L 002	L 002	L 005	L 002	--	--
83-06-07	1845	462	L 004	--	L 002	L 002	L 005	L 002	--	--
83-07-12	1750	462	L 004	--	L 002	L 002	L 005	L 002	--	--
83-08-16	1348	462	L 004	--	L 002	L 002	L 005	L 002	--	--
83-09-13	1840	462	L 004	--	--	--	--	L 002	--	--
83-10-11	1708	462	L 004	--	--	--	--	L 002	--	--
83-11-08	1700	462	L 004 40W	--	--	--	--	L 002 64R	--	--
83-12-13	1800	462	L 004	--	--	--	--	L 002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 00SA05JK0003
QU'APPELLE RIVER ABOVE PASQUA LAKE. SASKATCHEWAN LAT. 50D 47M 35 LONG. 104D 17M 35S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-02	1400	138	--	--	2350.	--	7.7	--	8.9	--
83-01-05	1500	138	--	--	2300.	--	8.0	--	10.2	--
83-01-08	1400	138	--	--	2360.	--	8.1	--	6.8	--
83-01-11	1300	138	--	--	2240.	--	8.2	--	8.0	--
83-01-14	1300	138	--	--	2250.	--	8.1	--	7.2	--
83-01-17	1200	138	--	--	2250.	--	7.8	--	10.5	--
83-01-20	1400	138	--	--	2470.	--	7.7	--	7.2	--
83-01-23	1500	138	--	--	2400.	--	8.0	--	7.0	--
83-01-26	1400	138	--	--	2300.	--	8.0	--	7.0	--
83-01-29	1600	138	--	--	2380.	--	7.7	--	10.0	--
83-02-01	1400	138	--	--	2340.	--	7.9	--	8.2	--
83-02-04	1400	138	--	--	2520.	--	7.7	--	10.0	--
83-02-07	1400	138	--	--	2260.	--	7.9	--	6.2	--
83-02-10	1500	138	--	--	2240.	--	8.0	--	5.2	--
83-02-13	1400	138	--	--	2480.	--	7.8	--	6.6	--
83-02-15	1500	138	--	--	2420.	--	7.9	--	7.0	--
83-02-19	1500	138	--	--	2310.	--	7.8	--	5.6	--
83-02-22	1500	138	--	--	2280.	--	7.8	--	5.4	--
83-02-25	1500	138	--	--	2300.	--	7.9	--	5.2	--
83-02-28	1500	138	--	--	2310.	--	7.9	--	4.8	--
83-03-03	1500	138	--	--	2370.	--	7.8	--	4.8	--
83-03-06	1400	138	--	--	2240.	--	7.9	--	7.3	--
83-03-12	1500	138	--	--	2210.	--	8.0	--	5.8	--
83-03-15	1500	138	--	--	2240.	--	7.8	--	5.2	--
83-03-18	1500	138	--	--	2380.	--	8.0	--	5.1	--
83-03-21	1800	138	--	--	2350.	--	8.0	--	5.2	--
83-03-24	1500	138	--	--	2340.	--	8.0	--	12.0	--
83-03-27	1500	138	--	--	2360.	--	8.0	--	28.0	--
83-03-30	1500	138	--	--	2340.	--	8.0	--	20.0	--
83-04-04	1045	138	--	--	1430.	--	7.9	--	1.0	--
83-04-07	1300	138	--	--	1180.	--	7.4	--	14.0	--
83-04-11	0930	138	--	--	970.	--	7.8	--	23.0	--
83-04-14	1230	138	--	--	950.	--	7.2	--	24.0	--
83-04-18	1230	138	--	--	680.	--	7.5	--	47.0	--
83-04-21	1340	138	16.0	--	678.	--	7.7	--	54.0	--
83-04-25	1400	138	19.0	--	550.	--	8.1	--	71.0	--
83-04-28	1400	138	17.0	--	614.	--	8.2	--	47.0	--
83-05-02	0913	138	--	--	590.	--	8.3	--	49.0	--
83-05-06	1440	138	--	--	600.	--	8.6	--	32.0	--
83-05-09	1230	138	--	--	550.	--	8.6	--	24.0	--
83-05-12	1140	138	--	--	575.	--	8.3	--	30.0	--
83-05-16	1200	138	--	--	680.	--	7.9	--	32.0	--
83-05-19	1300	138	--	--	690.	--	8.6	--	22.0	--
83-05-23	1530	138	--	--	750.	--	8.6	--	20.0	--
83-05-26	1130	138	--	--	830.	--	8.5	--	34.0	--
83-05-30	1130	138	--	--	880.	--	8.3	--	50.0	--
83-06-06	1130	138	--	--	880.	--	8.0	--	180.0	--
83-06-09	1200	138	--	--	900.	--	8.1	--	120.0	--
83-06-13	1200	138	--	--	900.	--	7.7	--	150.0	--
83-06-16	1230	138	--	--	970.	--	8.1	--	120.0	--
83-06-20	1230	138	--	--	1120.	--	7.8	--	140.0	--
83-06-22	1200	138	--	--	1300.	--	7.8	--	120.0	--
83-06-27	1200	138	--	--	1350.	--	7.7	--	120.0	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	35012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-02	1400	138	--	15.	--	--	--	--	--	--
83-01-05	1500	138	--	13.	--	--	--	--	--	--
83-01-08	1400	138	--	8.	--	--	--	--	--	--
83-01-11	1300	138	--	12.	--	--	--	--	--	--
83-01-14	1300	138	--	11.	--	--	--	--	--	--
83-01-17	1200	138	--	29.	--	--	--	--	--	--
83-01-20	1400	138	--	11.	--	--	--	--	--	--
83-01-23	1500	138	--	2.	--	--	--	--	--	--
83-01-26	1400	138	--	10.	--	--	--	--	--	--
83-01-29	1800	138	--	15.	--	--	--	--	--	--
83-02-01	1400	138	--	8.	--	--	--	--	--	--
83-02-04	1400	138	--	10.	--	--	--	--	--	--
83-02-07	1400	138	--	5.	--	--	--	--	--	--
83-02-10	1500	138	--	4.	--	--	--	--	--	--
83-02-13	1400	138	--	7.	--	--	--	--	--	--
83-02-15	1500	138	--	7.	--	--	--	--	--	--
83-02-19	1500	138	--	9.	--	--	--	--	--	--
83-02-22	1500	138	--	11.	--	--	--	--	--	--
83-02-25	1500	138	--	6.	--	--	--	--	--	--
83-02-28	1500	138	--	5.	--	--	--	--	--	--

STATION - 00SA05JK0003
QU'APPELLE RIVER ABOVE PASQUA LAKE, SASKATCHEWAN LAT. 500 47M 35S LONG. 104D 17M 35S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL	UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-03-03	1500	138	--		4	--	--	--	--	--	--
83-03-09	1400	138	--		5	--	--	--	--	--	--
83-03-12	1500	138	--		6	--	--	--	--	--	--
83-03-15	1500	138	--		9	--	--	--	--	--	--
83-03-18	1500	138	--		L1	--	--	--	--	--	--
83-03-21	1600	138	--		6	--	--	--	--	--	--
83-03-24	1500	138	--		15	--	--	--	--	--	--
83-03-27	1500	138	--		31	--	--	--	--	--	--
83-03-30	1500	138	--		23	--	--	--	--	--	--
83-04-04	1045	138	--		9	--	--	--	--	--	--
83-04-07	1300	138	--		21	--	--	--	--	--	--
83-04-11	0930	138	--		33	--	--	--	--	--	--
83-04-14	1230	138	--		39	--	--	--	--	--	--
83-04-18	1230	138	--		79	--	--	--	--	--	--
83-04-21	1340	138	--		72	--	--	--	--	--	--
83-04-25	1400	138	--		57	--	--	--	--	--	--
83-04-28	1400	138	--		63	--	--	--	--	--	--
83-05-02	0913	138	--		61	--	--	--	--	--	--
83-05-05	1440	138	--		38	--	--	--	--	--	--
83-05-09	1230	138	--		40	--	--	--	--	--	--
83-05-12	1140	138	--		38	--	--	--	--	--	--
83-05-16	1200	138	--		58	--	--	--	--	--	--
83-05-19	1300	138	--		40	--	--	--	--	--	--
83-05-23	1530	138	--		70	--	--	--	--	--	--
83-05-26	1130	138	--		61	--	--	--	--	--	--
83-05-30	1130	138	--		90	--	--	--	--	--	--
83-06-06	1130	138	--		387	--	--	--	--	--	--
83-06-09	1200	138	--		264	--	--	--	--	--	--
83-06-13	1200	138	--		302	--	--	--	--	--	--
83-06-16	1230	138	--		223	--	--	--	--	--	--
83-06-20	1230	138	--		294	--	--	--	--	--	--
83-06-22	1200	138	--		138	--	--	--	--	--	--
83-06-27	1200	138	--		135	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-02	1400	138	.170	.110	060	--	3.20	3.20	15	3.35
83-01-05	1500	138	.160	120	040	--	3.20	3.00	13	3.13
83-01-08	1400	138	150	120	040	--	3.30	3.20	10	3.30
83-01-11	1300	138	.380	380	000	--	3.30	3.30	12	3.42
83-01-14	1300	138	170	110	060	--	3.60	3.60	09	3.69
83-01-17	1200	138	210	160	050	--	3.60	3.70	.15	3.85
83-01-20	1400	138	180	140	040	--	1.70	1.60	09	1.69
83-01-23	1500	138	180	150	030	--	1.70	1.70	11	1.81
83-01-26	1400	138	190	160	030	--	1.70	1.70	11	1.81
83-01-29	1600	138	190	150	040	--	1.70	1.70	09	1.79
83-02-01	1400	138	180	130	050	--	80	95	13	1.08
83-02-04	1400	138	.210	160	050	--	2.80	2.50	11	2.61
83-02-07	1400	138	210	--	--	--	3.20	2.90	10	3.00
83-02-10	1500	138	210	160	050	--	3.80	3.80	04	3.84
83-02-13	1400	138	.230	160	070	--	3.60	3.50	07	3.57
83-02-16	1500	138	230	180	050	--	4.20	4.20	09	4.29
83-02-19	1500	138	230	170	060	--	4.20	4.20	13	4.33
83-02-22	1500	138	240	180	060	--	4.10	4.00	.13	4.13
83-02-25	1500	138	240	190	050	--	4.20	4.00	12	4.12
83-02-28	1500	138	260	180	080	--	4.20	4.00	12	4.12
83-03-03	1500	138	270	200	070	--	4.90	4.80	14	4.94
83-03-09	1400	138	.290	.220	070	--	5.10	5.10	12	5.22
83-03-12	1500	138	.280	200	080	--	4.30	4.00	.14	4.14
83-03-15	1500	138	.360	230	130	--	4.20	4.20	.13	4.33
83-03-18	1500	138	340	280	.060	--	5.00	4.90	.10	5.00
83-03-21	1600	138	.320	.250	070	--	4.40	4.40	14	4.54
83-03-24	1500	138	440	.340	.100	--	4.60	4.60	.26	4.86
83-03-27	1500	138	380	280	100	--	3.40	3.10	.40	3.50
83-03-30	1500	138	.350	.280	.070	--	3.50	3.60	.51	4.11
83-04-04	1045	138	.390	.340	050	--	2.60	2.60	.31	2.91
83-04-07	1300	138	.370	250	120	--	2.60	2.70	29	2.99
83-04-11	0930	138	.290	170	120	--	2.20	2.30	.47	2.77
83-04-14	1230	138	.260	130	130	--	2.00	2.20	.39	2.59
83-04-18	1230	138	.270	.065	.205	--	1.10	1.40	.66	2.06
83-04-21	1340	138	.280	.074	206	--	1.20	1.20	.66	1.86
83-04-25	1400	138	.220	.072	.148	--	.76	.85	.64	1.49
83-04-28	1400	138	.210	.079	.131	--	.71	.80	.42	1.22

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 05SA05JK0003
QU'APPELLE RIVER ABOVE PASQUA LAKE. SASKATCHEWAN

LAT. 50D 47M 35S LONG. 104D 17M 35S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-05-02	0913	138	.210	.076	.134	--	.86	.91	.53	1.44
83-05-05	1440	138	.170	.061	.109	--	.57	.66	.40	1.08
83-05-09	1230	138	.170	.067	.103	--	.73	.71	.31	1.02
83-05-12	1140	138	.200	.086	.114	--	.71	.71	.35	1.06
83-05-16	1200	138	.170	.065	.105	--	.64	.65	.39	1.04
83-05-19	1300	138	.170	.057	.113	--	.58	.59	.34	.93
83-05-23	1530	138	.220	.081	.139	--	.62	.64	.42	1.06
83-05-26	1130	138	.310	.130	.180	--	.73	.77	.69	1.46
83-05-30	1130	138	.400	.130	.270	--	.76	.86	.86	1.72
83-06-06	1130	138	.700	.088	.612	--	.75	.91	2.30	3.21
83-06-09	1200	138	.410	.092	.318	--	.85	1.00	.91	1.91
83-06-13	1200	138	.600	.080	.520	--	.84	1.10	.98	2.08
83-06-16	1230	138	.400	.077	.323	--	.90	1.10	1.20	2.30
83-06-20	1230	138	.540	.043	.497	--	1.30	1.40	1.40	2.80
83-06-22	1200	138	.300	.050	.250	--	2.50	2.70	.74	3.44
83-06-27	1200	138	.320	.083	.237	--	3.30	3.40	.86	4.26

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-02	1400	138	.35	--	15.0	1.00	16.0	--	--	--
83-01-05	1500	138	.38	--	12.0	.96	13.0	--	--	--
83-01-08	1400	138	.42	--	12.0	.65	12.7	--	--	--
83-01-11	1300	138	.43	--	12.0	.72	12.7	--	--	--
83-01-14	1300	138	.45	--	12.0	.59	12.6	--	--	--
83-01-17	1200	138	.46	--	13.0	1.20	14.2	--	--	--
83-01-20	1400	138	.47	--	13.0	.59	13.6	--	--	--
83-01-23	1500	138	.47	--	13.0	.68	13.7	--	--	--
83-01-26	1400	138	.49	--	13.0	.63	13.6	--	--	--
83-01-29	1600	138	.60	--	13.0	.64	13.6	--	--	--
83-02-01	1400	138	.64	--	13.0	.76	13.8	--	--	--
83-02-04	1400	138	.66	--	16.0	.72	16.7	--	--	--
83-02-07	1400	138	.68	--	16.0	.67	16.7	--	--	--
83-02-10	1500	138	.70	--	12.0	.18	12.2	--	--	--
83-02-13	1400	138	.66	--	13.0	.33	13.3	--	--	--
83-02-15	1500	138	.70	--	13.0	.56	13.6	--	--	--
83-02-19	1500	138	.80	--	12.0	.76	12.8	--	--	--
83-02-22	1500	138	.76	--	13.0	.72	13.7	--	--	--
83-02-25	1500	138	.75	--	12.0	.71	12.7	--	--	--
83-02-28	1500	138	.85	--	12.0	.72	12.7	--	--	--
83-03-03	1500	138	.80	--	13.0	.63	13.6	--	--	--
83-03-09	1400	138	.76	--	12.0	.66	12.7	--	--	--
83-03-12	1500	138	1.40	--	11.0	.53	11.5	--	--	--
83-03-15	1500	138	.90	--	12.0	.79	12.8	--	--	--
83-03-18	1500	138	.90	--	12.0	.60	12.6	--	--	--
83-03-21	1600	138	.95	--	12.0	.80	12.8	--	--	--
83-03-24	1500	138	1.00	--	12.0	1.70	13.7	--	--	--
83-03-27	1500	138	1.20	--	13.0	2.50	15.5	--	--	--
83-03-30	1500	138	1.20	--	12.0	3.50	15.5	--	--	--
83-04-04	1045	138	.80	--	14.0	1.70	15.7	--	--	--
83-04-07	1300	138	.85	--	12.0	1.50	13.5	--	--	--
83-04-11	0930	138	.95	--	11.0	2.50	13.5	--	--	--
83-04-14	1230	138	1.00	--	10.0	2.30	12.3	--	--	--
83-04-18	1230	138	.58	--	9.4	3.70	13.1	--	--	--
83-04-21	1340	138	.50	--	9.6	3.40	13.0	--	--	--
83-04-25	1400	138	.15	--	9.7	3.30	13.0	--	--	--
83-04-28	1400	138	.19	--	9.0	2.10	11.1	--	--	--
83-05-02	0913	138	.28	--	9.7	2.90	12.6	--	--	--
83-05-05	1440	138	.02	--	9.7	2.10	11.8	--	--	--
83-05-09	1230	138	L.01	--	10.0	1.60	11.6	--	--	--
83-05-12	1140	138	L.01	--	10.0	.89	10.9	--	--	--
83-05-16	1200	138	L.01	--	9.7	2.00	11.7	--	--	--
83-05-19	1300	138	L.01	--	9.7	1.80	11.5	--	--	--
83-05-23	1130	138	L.01	--	10.0	2.10	12.1	--	--	--
83-05-26	1130	138	L.01	--	10.0	4.20	14.2	--	--	--
83-05-30	1130	138	L.01	--	11.0	4.50	15.5	--	--	--
83-06-06	1130	138	L.01	--	10.0	14.00	24.0	--	--	--
83-06-09	1200	138	.02	--	11.0	6.90	17.9	--	--	--
83-06-13	1200	138	.06	--	10.0	7.50	17.5	--	--	--
83-06-16	1230	138	L.01	--	10.0	8.20	18.2	--	--	--
83-06-20	1230	138	.78	--	10.0	8.80	18.8	--	--	--
83-06-22	1200	138	2.60	--	9.2	4.60	13.8	--	--	--
83-06-27	1200	138	.56	--	11.0	5.50	16.5	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 05SA05JL0001 LAT. 50D 38M 58S LONG. 103D 35M 20S
QU'APPELLE RIVER AT OUTLET OF KATEPWA LAKE, SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG C.	02061L TEMP. WATER DEG C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-02	1300	138	--	--	1650.	--	8.1	--	1.4	--
83-01-05	1400	138	--	--	1630	--	8.0	--	1.4	--
83-01-08	1300	138	--	--	1670	--	7.9	--	.8	--
83-01-11	1400	138	--	--	1580.	--	8.0	--	1.0	--
83-01-14	1430	138	--	--	1700	--	8.0	--	1.1	--
83-01-17	1300	138	--	--	1690	--	8.1	--	.6	--
83-01-20	1300	138	--	--	1690	--	7.9	--	.7	--
83-01-23	1300	138	--	--	1640	--	8.2	--	.7	--
83-01-26	1300	138	--	--	1630	--	8.0	--	.7	--
83-01-29	1500	138	--	--	1650	--	7.9	--	.8	--
83-02-01	1300	138	--	--	1610	--	8.1	--	.9	--
83-02-04	1300	138	--	--	1630	--	7.9	--	1.0	--
83-02-07	1300	138	--	--	1660	--	8.1	--	.7	--
83-02-10	1400	138	--	--	1670	--	8.0	--	.7	--
83-02-13	1300	138	--	--	1640	--	8.0	--	.6	--
83-02-16	1400	138	--	--	1620	--	8.0	--	.8	--
83-02-19	1400	138	--	--	1600	--	8.0	--	.7	--
83-02-22	1400	138	--	--	1640	--	8.0	--	1.0	--
83-02-25	1400	138	--	--	1600	--	8.1	--	1.1	--
83-02-28	1400	138	--	--	1580	--	8.0	--	.8	--
83-03-03	1400	138	--	--	1580	--	8.0	--	.6	--
83-03-06	1400	138	--	--	1650	--	8.0	--	.8	--
83-03-09	1700	138	--	--	1840	--	8.0	--	2.4	--
83-03-12	1400	138	--	--	1470	--	7.9	--	1.0	--
83-03-15	1400	138	--	--	1520	--	8.0	--	1.2	--
83-03-18	1400	138	--	--	1560	--	7.9	--	.8	--
83-03-21	1401	138	--	--	1560	--	7.8	--	.7	--
83-03-24	1400	138	--	--	1560	--	8.0	--	.6	--
83-03-27	1400	138	--	--	1530	--	7.9	--	.7	--
83-03-30	1400	138	--	--	1560	--	8.0	--	.8	--
83-04-04	1130	138	--	--	1500.	--	7.7	--	8.4	--
83-04-07	1200	138	--	--	1400.	--	7.9	--	1.5	--
83-04-11	1050	138	--	--	1410	--	7.5	--	2.0	--
83-04-14	1330	138	--	--	1370.	--	7.5	--	2.7	--
83-04-18	1430	138	--	--	1350	--	7.4	--	4.8	--
83-04-21	1445	138	--	--	1360.	--	8.5	--	6.7	--
83-04-25	1515	138	--	--	1140	--	8.7	--	8.4	--
83-04-28	1600	138	--	--	1310.	--	8.2	--	3.6	--
83-05-02	1020	138	--	--	1340	--	8.4	--	2.8	--
83-05-05	1540	138	10.0	--	1430	--	8.7	--	1.9	--
83-05-09	1300	138	--	--	1450	--	8.2	--	2.1	--
83-05-12	1300	138	--	--	1510	--	8.5	--	3.0	--
83-05-16	1230	138	--	--	1450.	--	8.3	--	2.0	--
83-05-19	1200	138	--	--	2000	--	8.5	--	2.5	--
83-05-23	1430	138	--	--	1430.	--	8.7	--	2.4	--
83-05-26	1100	138	--	--	1370	--	8.6	--	2.4	--
83-05-30	1200	138	--	--	1500	--	8.7	--	3.4	--
83-06-02	1130	138	--	--	1530.	--	8.6	--	4.4	--
83-06-06	1200	138	--	--	1490	--	8.9	--	5.0	--
83-06-09	1230	138	--	--	1350.	--	8.7	--	2.5	--
83-06-13	1230	138	--	--	1520.	--	8.8	--	3.8	--
83-06-15	1200	138	--	--	1550.	--	8.8	--	4.4	--
83-06-20	1200	138	--	--	1550.	--	8.7	--	4.2	--
83-06-22	1230	138	--	--	1500.	--	8.8	--	6.5	--
83-06-27	1230	138	--	--	1460.	--	8.9	--	6.5	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED BC O2 MG/L
83-01-02	1300	138	--	5.	--	--	--	--	--	--
83-01-05	1400	138	--	3.	--	--	--	--	--	--
83-01-08	1300	138	--	1.	--	--	--	--	--	--
83-01-11	1400	138	--	1	--	--	--	--	--	--
83-01-14	1430	138	--	3.	--	--	--	--	--	--
83-01-17	1300	138	--	2.	--	--	--	--	--	--
83-01-20	1300	138	--	2.	--	--	--	--	--	--
83-01-23	1300	138	--	10.	--	--	--	--	--	--
83-01-26	1300	138	--	1.	--	--	--	--	--	--
83-01-29	1500	138	--	2.	--	--	--	--	--	--
83-02-01	1300	138	--	1.	--	--	--	--	--	--
83-02-04	1300	138	--	1.	--	--	--	--	--	--
83-02-07	1300	138	--	1.	--	--	--	--	--	--
83-02-10	1400	138	--	1.	--	--	--	--	--	--
83-02-13	1300	138	--	1.	--	--	--	--	--	--
83-02-16	1400	138	--	1.	--	--	--	--	--	--
83-02-19	1400	138	--	1.	--	--	--	--	--	--
83-02-22	1400	138	--	4.	--	--	--	--	--	--
83-02-25	1400	138	--	5.	--	--	--	--	--	--
83-02-28	1400	138	--	3.	--	--	--	--	--	--

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 00SA05JL0001
QU'APPELLE RIVER AT OUTLET OF KATEPWA LAKE, SASKATCHEWAN

LAT. 500 38M 58S LONG. 103D 35M 20S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED BO 02 MG/L
83-03-03	1400	138	--	4	--	--	--	--	--	--
83-03-06	1400	138	--	2	--	--	--	--	--	--
83-03-09	1700	138	--	8	--	--	--	--	--	--
83-03-12	1400	138	--	2	--	--	--	--	--	--
83-03-15	1400	138	--	4	--	--	--	--	--	--
83-03-18	1400	138	--	2	--	--	--	--	--	--
83-03-21	1401	138	--	1	--	--	--	--	--	--
83-03-24	1400	138	--	2	--	--	--	--	--	--
83-03-27	1400	138	--	L1	--	--	--	--	--	--
83-03-30	1400	138	--	4	--	--	--	--	--	--
83-04-04	1130	138	--	2	--	--	--	--	--	-
83-04-07	1200	138	--	3	--	--	--	--	--	--
83-04-11	1050	138	--	3	--	--	--	--	--	--
83-04-14	1330	138	--	6	--	--	--	--	--	--
83-04-18	1430	138	--	8	--	--	--	--	--	--
83-04-21	1445	138	--	12	--	--	--	--	--	--
83-04-25	1515	138	--	8	--	--	--	--	--	--
83-04-28	1600	138	--	7	--	--	--	--	--	--
83-05-02	1020	138	--	5	--	--	--	--	--	--
83-05-06	1540	138	--	4	--	--	--	--	--	--
83-05-09	1300	138	--	4	--	--	--	--	--	--
83-05-12	1300	138	--	3	--	--	--	--	--	--
83-05-16	1230	138	--	3	--	--	--	--	--	--
83-05-19	1200	138	--	3	--	--	--	--	--	--
83-05-23	1430	138	--	2	--	--	--	--	--	--
83-05-26	1100	138	--	4	--	--	--	--	--	--
83-05-30	1200	138	--	4	--	--	--	--	--	--
83-06-02	1130	138	--	7	--	--	--	--	--	--
83-06-06	1200	138	--	2	--	--	--	--	--	--
83-06-09	1230	138	--	3	--	--	--	--	--	--
83-06-13	1230	138	--	5	--	--	--	--	--	--
83-06-15	1200	138	--	5	--	--	--	--	--	--
83-06-20	1200	138	--	3	--	--	--	--	--	--
83-06-22	1230	138	--	2	--	--	--	--	--	--
83-06-27	1230	138	--	4	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-02	1300	138	.480	.400	.080	--	1.00	1.00	.07	1.07
83-01-05	1400	138	.440	.400	.040	--	1.00	1.00	.05	1.05
83-01-08	1300	138	.440	.110	.330	--	.86	.86	.06	.92
83-01-11	1400	138	.160	.120	.040	--	.89	.87	.05	.92
83-01-14	1430	138	.380	.380	.000	--	.91	.87	.07	.94
83-01-17	1300	138	.390	.390	.000	--	.97	.96	.04	1.00
83-01-20	1300	138	.400	.390	.010	--	.86	.91	.04	.95
83-01-23	1300	138	.400	.390	.010	--	.89	.89	.04	.93
83-01-26	1300	138	.380	.380	.000	--	.86	.84	.03	.87
83-01-29	1500	138	.380	.370	.010	--	.89	.88	.04	.92
83-02-01	1300	138	.390	.370	.020	--	.90	.90	.05	.95
83-02-04	1300	138	.390	--	--	--	.95	.93	L.01	Q.94
83-02-07	1300	138	.390	.350	.040	--	.91	.92	.05	.97
83-02-10	1400	138	--	.330	--	--	.90	.94	.11	1.05
83-02-13	1300	138	.370	.330	.040	--	.89	.89	.13	1.02
83-02-16	1400	138	.370	.370	.000	--	.94	.94	.04	.98
83-02-19	1400	138	.370	.350	.020	--	.93	.91	L.01	Q.92
83-02-22	1400	138	.380	.360	.020	--	.89	.92	.06	.98
83-02-25	1400	138	.380	.370	.010	--	.93	.89	.06	.95
83-02-28	1400	138	.370	.360	.010	--	.92	.92	.03	.95
83-03-03	1400	138	.360	.350	.010	--	.93	.94	.05	.99
83-03-06	1400	138	.370	.350	.020	--	.93	.94	.08	1.02
83-03-09	1700	138	.360	.340	.020	--	1.00	1.00	.10	1.10
83-03-12	1400	138	.350	.340	.010	--	.91	.88	.08	.96
83-03-15	1400	138	.390	.330	.060	--	.98	.97	.07	1.04
83-03-18	1400	138	.340	.330	.010	--	.96	.96	L.01	Q.97
83-03-21	1401	138	.340	.330	.010	--	.97	.96	.05	1.01
83-03-24	1400	138	.340	.310	.030	--	.92	.90	.05	.95
83-03-27	1400	138	.330	.310	.020	--	.93	.90	.09	.99
83-03-30	1400	138	.330	.320	.010	--	.97	.93	.07	1.00
83-04-04	1130	138	.340	.330	.010	--	.94	.94	.05	.99
83-04-07	1200	138	.340	.330	.010	--	.92	.94	.05	.99
83-04-11	1050	138	.320	.310	.010	--	.97	.93	.09	1.02
83-04-14	1330	138	.290	.280	.010	--	1.10	1.20	.07	1.27
83-04-18	1430	138	.290	.270	.020	--	1.20	1.30	.12	1.42
83-04-21	1445	138	.300	.270	.030	--	1.00	1.00	.16	1.16
83-04-25	1515	138	.240	.190	.050	--	.80	.79	.32	1.11
83-04-28	1600	138	.270	.220	.050	--	.58	.64	.15	.79

STATION - 00SA05JL0001
QU'APPELLE RIVER AT OUTLET OF KATEPWA LAKE, SASKATCHEWAN

LAT. 50D 38M 58S LONG. 103D 35M 20S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-05-02	1020	138	.290	.260	.030	--	.65	.67	.35	1.02
83-05-05	1540	138	.380	.360	.020	--	.69	.74	.15	.89
83-05-09	1300	138	.420	.410	.010	--	.88	.90	.04	.94
83-05-12	1300	138	.410	.400	.010	--	.97	.98	.10	1.08
83-05-16	1230	138	.410	.330	.080	--	.84	.85	.08	.93
83-05-19	1200	138	.410	.370	.040	--	.78	.79	.09	.88
83-05-23	1430	138	.410	.340	.070	--	.68	.66	.21	.87
83-05-26	1100	138	.390	.370	.020	--	.74	.80	.12	.92
83-05-30	1200	138	.400	.330	.070	--	.71	.73	.17	.90
83-06-02	1130	138	.400	.330	.070	--	.72	.74	.23	.97
83-06-06	1200	138	.420	.370	.050	--	.66	.72	.12	.84
83-06-09	1230	138	.380	.330	.050	--	.68	.68	.14	.82
83-06-13	1230	138	.370	.320	.050	--	.68	.73	.07	.80
83-06-15	1200	138	.340	.310	.030	--	.65	.65	.20	.85
83-06-20	1200	138	.370	.330	.040	--	.68	.66	.07	.73
83-06-22	1230	138	.360	.310	.050	--	.67	.73	.07	.80
83-06-27	1230	138	.370	.300	.070	--	.72	.73	.17	.90

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-02	1300	138	.11	--	13.0	.39	13.4	--	--	--
83-01-05	1400	138	.13	--	10.0	.42	10.4	--	--	--
83-01-08	1300	138	.14	--	11.0	.35	11.4	--	--	--
83-01-11	1400	138	.14	--	10.0	.28	10.3	--	--	--
83-01-14	1430	138	.13	--	11.0	.42	11.4	--	--	--
83-01-17	1300	138	.13	--	11.0	.23	11.2	--	--	--
83-01-20	1300	138	.12	--	11.0	.22	11.2	--	--	--
83-01-23	1300	138	.12	--	11.0	.25	11.2	--	--	--
83-01-26	1300	138	.13	--	11.0	.19	11.2	--	--	--
83-01-29	1500	138	.20	--	11.0	.24	11.2	--	--	--
83-02-01	1300	138	.20	--	11.0	.34	11.3	--	--	--
83-02-04	1300	138	.22	--	14.0	.27	14.3	--	--	--
83-02-07	1300	138	.21	--	14.0	.37	14.4	--	--	--
83-02-10	1400	138	.21	--	11.0	.64	11.6	--	--	--
83-02-13	1300	138	.22	--	11.0	.76	11.8	--	--	--
83-02-16	1400	138	.23	--	12.0	.23	12.2	--	--	--
83-02-19	1400	138	.23	--	11.0	.30	11.3	--	--	--
83-02-22	1400	138	.22	--	1.1	.47	1.6	--	--	--
83-02-25	1400	138	.22	--	11.0	.34	11.3	--	--	--
83-02-28	1400	138	.23	--	10.0	.21	10.2	--	--	--
83-03-03	1400	138	.26	--	12.0	.22	12.2	--	--	--
83-03-06	1400	138	.25	--	11.0	.38	11.4	--	--	--
83-03-09	1700	138	.23	--	11.0	.66	11.7	--	--	--
83-03-12	1400	138	.26	--	10.0	.34	10.3	--	--	--
83-03-15	1400	138	.26	--	11.0	.39	11.4	--	--	--
83-03-18	1400	138	.28	--	11.0	.26	11.3	--	--	--
83-03-21	1401	138	.24	--	11.0	.32	11.3	--	--	--
83-03-24	1400	138	.25	--	11.0	.29	11.3	--	--	--
83-03-27	1400	138	.26	--	11.0	.52	11.5	--	--	--
83-03-30	1400	138	.26	--	11.0	.43	11.4	--	--	--
83-04-04	1130	138	.24	--	11.0	.19	11.2	--	--	--
83-04-07	1200	138	.24	--	11.0	.40	11.4	--	--	--
83-04-11	1050	138	.27	--	11.0	.52	11.5	--	--	--
83-04-14	1330	138	.43	--	11.0	.43	11.4	--	--	--
83-04-18	1430	138	.50	--	9.9	.63	10.5	--	--	--
83-04-21	1445	138	.39	--	9.7	.85	10.6	--	--	--
83-04-25	1515	138	.11	--	8.9	1.60	10.5	--	--	--
83-04-28	1600	138	L.01	--	9.0	.84	9.8	--	--	--
83-05-02	1020	138	L.01	--	9.5	1.90	11.4	--	--	--
83-05-05	1540	138	.16	--	9.6	.73	10.3	--	--	--
83-05-09	1300	138	.22	--	10.0	.21	10.2	--	--	--
83-05-12	1300	138	.18	--	10.0	.35	10.4	--	--	--
83-05-16	1230	138	.19	--	9.7	.40	10.1	--	--	--
83-05-19	1430	138	.18	--	9.6	.43	10.0	--	--	--
83-05-23	1430	138	.06	--	9.8	1.40	11.2	--	--	--
83-05-26	1100	138	.06	--	9.8	.76	10.6	--	--	--
83-05-30	1200	138	L.01	--	9.9	.90	10.8	--	--	--
83-06-02	1130	138	.04	--	9.4	1.30	10.7	--	--	--
83-06-06	1200	138	L.01	--	10.0	.61	10.6	--	--	--
83-06-09	1230	138	.02	--	9.9	.74	10.6	--	--	--
83-06-13	1230	138	L.01	--	10.0	.49	10.5	--	--	--
83-06-15	1200	138	L.01	--	9.9	.97	10.9	--	--	--
83-06-20	1200	138	L.01	--	10.0	.39	10.4	--	--	--
83-06-22	1230	138	.10	--	10.0	.42	10.4	--	--	--
83-06-27	1230	138	L.01	--	10.0	.86	10.9	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 00SA05JM0014 LAT. 50D 29M 2S LONG. 101D 32M 35S
QU'APPELLE RIVER APPROX. 3.2KM. SOUTH OF MELBY SASKATCHEWAN

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-24 1115 462	.0	16.7 61R	1589.	1570. 41R	--	8.0 01R	12.0	8.7 73R
83-03-01 1040 462	.0	23.6	1680.	1700.	8.3	8.0	--	11.0
83-03-29 1200 462	.5	21.9	1764.	1690.	8.2	8.1	11.0	7.1
83-04-26 1350 462	8.0	19.0	1200.	1042.	8.1	8.0	124.0	80.0
83-05-24 1328 462	12.0	22.2	1399.	1460.	8.2	8.2	56.0	38.0
83-06-13 1349 462	18.0	12.1	1438.	1500.	8.3	8.3	61.0	44.0
83-07-18 1200 462	22.0	11.4	1446.	1490.	8.5	8.3	62.0	37.0
83-08-22 1237 462	19.0	22.8	1493	1520.	8.6	8.4	56.0	3.3
83-09-19 1215 462	8.0	14.2	1460.	1470.	8.4	8.4	39.0	27.0
83-10-17 1200 462	5.0	14.4 61R	1464.	1470. 41R	8.6	8.4 01R	16.0	7.7 73R
83-11-14 1210 462	2.0	16.5	1435.	1500.	8.5	8.2	12.0	5.5
83-12-05 1120 462	.2	6.0	1479.	1550.	8.4	8.0	7.6	5.1

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-24 1115 462	10. 21R	22. 01R	18. 01R	.003 17T	L2. 02U	L2. 12U	--	8.6
83-03-01 1040 462	10.	22.	18.	.001	L2.	L2.	--	8.6
83-03-29 1200 462	20.	18.	16.	.020	--	--	--	8.7
83-04-26 1350 462	40.	244.	224.	030	30.	L2.	--	9.5
83-05-24 1328 462	20.	99.	91.	.010	18.	8.	--	8.5
83-06-13 1349 462	20.	104.	93.	.010	52.	22.	--	8.7
83-07-18 1200 462	20.	108.	97.	.080	240.	60.	--	8.4
83-08-22 1237 462	20.	71.	64.	.020	100.	44.	--	8.5
83-09-19 1215 462	10.	53.	47.	.003	60.	28.	--	10.6
83-10-17 1200 462	10. 21R	18. 01R	17. 01R	.007 17T	42. 02U	10. 12U	--	11.8
83-11-14 1210 462	10.	13.	11.	.009	24.	2.	--	12.5
83-12-05 1120 462	15.	10.	8.	.001	10.	L2.	--	11.4

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-24 1115 462	0.	.0 51R	354.	290.0 01R	75.8 03R	66.0 02R	461.0	210.0 03R
83-03-01 1040 462	0.	.0	366.	300.0	77.0	66.0	464.0	210.0
83-03-29 1200 462	0.	.0	372.	305.0	76.9	69.0	476.1	230.0
83-04-26 1350 462	0.	.0	244.	200.0	56.4	37.9	296.9	105.0
83-05-24 1328 462	0.	.0	323.	265.0	73.8	56.0	414.8	170.0
83-06-13 1349 462	0.	.0	329.	270.0	73.3	56.0	413.6	175.0
83-07-18 1200 462	0.	.0	317.	260.0	71.6	58.0	417.6	172.0
83-08-22 1237 462	3.	2.9	322.	270.0	74.0	58.0	423.6	173.0
83-09-19 1215 462	4.	3.0	316.	265.0	72.0	58.0	418.6	185.0
83-10-17 1200 462	6.	5.3 51R	304.	260.0 06R	70.9 03R	61.0 02R	428.2	157.0 03R
83-11-14 1210 462	0.	.0	311.	255.0 06L	73.3	56.1	414.0	168.0
83-12-05 1120 462	0.	.0	332.	272.0 06L	78.2	60.2	443.1	185.0

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-24 1115 462	18.0 03R	92.0 06R	.19 05R	530. 06R	--	--	--	.003 04W
83-03-01 1040 462	18.0	100.0	.25	490.	12.0	1153.	--	.003
83-03-29 1200 462	19.0	96.0	.14	500.	11.0	1185.	--	.005
83-04-26 1350 462	13.0	56.0	.19	252.	10.0	650.	--	.004
83-05-24 1328 462	15.0	80.0	.16	388.	8.8	951.	--	.004
83-06-13 1349 462	17.0	80.0	.19	415.	10.0	988.	--	.003
83-07-18 1200 462	17.0	75.0	.19	390.	12.0	952.	--	.003
83-08-22 1237 462	16.0	85.0	.23	408.	15.0	991.	--	.006
83-09-19 1215 462	17.0	85.0	.20	416.	13.0	1005.	--	.009
83-10-17 1200 462	16.0 03R	82.0 06R	.18 08L	414. 06R	--	--	--	.004 04W
83-11-14 1210 462	16.5	85.4	.24 08L	411.	8.4 02L	972.	--	.003
83-12-05 1120 462	18.0	90.1	.24 08L	445.	8.8 02L	1049.	--	.004

STATION - 00SA05JM0014 LAT. 500 29M 2S LONG. 1010 32M 35S
QU'APPELLE RIVER APPROX. 3.2KM. SOUTH OF WELBY SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-24	1115	482	.220 06R	.190 03V	.030	.170 56V	.69 51V	.69 51R	.10 02R	.79
83-03-01	1040	482	.230	200	030	170	.75	.75	.10	.85
83-03-29	1200	482	.240	210	030	.190	.80	.83	.09	.92
83-04-26	1350	482	.260	110	150	.068	.69	.75	.57	1.32
83-05-24	1328	482	.210	.120	090	083	.60	.59	.29	.88
83-06-13	1349	482	.230	.130	100	.110	.56	.56	.24	.80
83-07-18	1200	482	.220	098	122	.068	.58	.71	.34	1.05
83-08-22	1237	482	.310	190	120	.170	.59	.55	.61	1.16
83-09-19	1215	482	.300	.240	060	220	.78	.78	.29	1.07
83-10-17	1200	482	.220 06R	.190 03V	.030	.180 56V	.53 51V	.53 51R	.15 02R	.68
83-11-14	1210	482	.240	.220	.020	.200	.58	.58	.12	.70
83-12-06	1120	482	.270	250	020	.200	.62	.64	.07	.71

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-24	1115	482	.12 10R	1 06W	8.7 04R	.71 02R	9.4	.42 05V	.0055 04V	L.0005 02V
83-03-01	1040	482	.21	L.1	9.0	.73	9.7	.35 05L	.0041	L.0005
83-03-29	1200	482	.24	L.1	9.4	.66	10.1	.40	.0061	L.0005
83-04-26	1350	482	.21	.1	8.7	3.70	12.4	.25	.0039	L.0005
83-05-24	1328	482	.05	L.1	9.0	2.50	11.5	.31	.0034	L.0005
83-06-13	1349	482	L.01	L.1	9.1	3.10	12.2	.35	.0056	L.0005
83-07-18	1200	482	.01	L.1	8.7	2.20	10.9	.33	.0065 08D	L.0005 08D
83-08-22	1237	482	L.01	L.1	9.4	3.40	12.8	.36	.0096 08D	.0003 08D
83-09-19	1215	482	.14	.1	8.2	1.70	9.9	.37	.0079 08D	.0004 08D
83-10-17	1200	482	L.01 10R	L.1 06W	7.9 04R	.90 02R	8.8	.34 05V	.0079 08V	.0003 08V
83-11-14	1210	482	.05	L.1	8.4	.69	9.1	.35	.0079 08D	.0003 08D
83-12-06	1120	482	.15	L.1	9.5	.49	10.0	.39	.0086 08D	.0003 08D
	1120	482	--	--	--	--	--	--	.0086 08L	.0003 08L

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-24	1115	482	.15 02W	--	--	.02 04T	--	L.04 04T	.02 11W	.003 20W
83-03-01	1040	482	43	--	--	.02	--	L.04	L.02	.003
83-03-29	1200	482	.12	--	--	.03	--	L.04	L.02	.003
83-04-26	1350	482	51	--	--	.03	--	L.04	L.02	.011
83-05-24	1328	482	.20	--	--	17	--	L.04	.02	.004
83-06-13	1349	482	42	--	--	.11	--	L.04	L.02	.011
83-07-18	1200	482	18	--	--	.08	--	L.04	.03	008
83-08-22	1237	482	70	--	--	.11	--	L.04	L.02	.005 02P
83-09-19	1215	482	.48	--	--	.09	--	L.04	.02	.005 02P
83-10-17	1200	482	.18 02W	--	--	.16 04T	--	L.04 04T	L.02 11W	.004 02W
83-11-14	1210	482	.19	--	--	.03	--	L.04	.05	.007 02P
83-12-06	1120	482	L.10	--	--	.04	--	L.04	L.02	.007 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-24	1115	482	L.015 02W	L.002 20W	L.002 20W	.002 20W	.001 20W	L.001 20W	.05 20W	L.004 20W
83-03-01	1040	482	L.015	L.002	L.002	L.001	.004	L.001	07	L.004
83-03-29	1200	482	L.015	L.002	L.002	.002	--	L.001	L.05	L.004
83-04-26	1350	482	L.015	L.002	.008	.005	.040	L.001	.05	L.004
83-05-24	1328	482	L.015	L.002	.003	.003	.008	L.001	.05	L.004
83-06-13	1349	482	L.015	L.002	.008	.003	.011	L.001	.05	L.004
83-07-18	1200	482	L.015	L.002	.008	.005	.004	L.001	L.05	L.004
83-08-22	1237	482	--	L.001 02P	.006 02P	.004 05P	.010 05P	L.001 02P	.10 01P	L.001 02P
83-09-19	1215	482	--	L.001 02P	.005 02P	.003 05P	.003 05P	L.001 02P	L.10 01P	L.001 02P
83-10-17	1200	482	L.001 03P	L.001 02W	.003 02W	.002 05P	L.001 05W	L.001 02W	.14 01W	.002 02W
83-11-14	1210	482	.001 03P	.001 02P	.002 02P	.001 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P
83-12-06	1120	482	.001 03P	.001 02P	.003 02P	.002 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 05SA05JM0014 LAT. 50D 28M 25 LONG. 101D 32M 35S
QU'APPELLE RIVER APPROX. 3.2KM. SOUTH OF WELBY SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-24	1115	462	.003 35W	L.001 11R	.003 75R	L.001 70R	L.001 30R	L.002 10R	L.001 20R	L.001 05R
83-03-01	1040	462	.003	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-03-29	1200	462	.002	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-04-26	1350	462	.007	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-05-24	1328	462	.005	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-06-13	1349	462	.010	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-07-18	1200	462	.011	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-08-22	1237	462	.005	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-09-19	1215	462	.003	L.001	.004	L.001	L.001	L.002	L.001	L.004
83-10-17	1200	462	.003 35W	L.001 11R	.006 75R	.001 70R	L.001 30R	L.002 10R	L.001 20R	L.001 05R
83-11-14	1210	462	003	L.001	.006	L.001	L.001	L.002	L.001	L.001
83-12-05	1120	462	--	L.001	.004	L.001	L.001	L.002	L.002	L.001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-24	1115	462	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R
83-03-01	1040	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-29	1200	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-26	1350	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-24	1328	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-13	1349	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-18	1200	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-22	1237	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-19	1215	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-17	1200	462	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R
83-11-14	1210	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-12-05	1120	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-24	1115	462	L.001 25R	L.003 60R	L.002 65R	L.2 20W	L.004 00W	L.009 50W	L.004 55W	L.002 10W
83-03-01	1040	462	L.001	L.003	L.002	L.2	.060	L.009	L.004	L.002
83-03-29	1200	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-04-26	1350	462	L.001	L.003	L.002	L.2	.050	L.009	L.004	L.002
83-05-24	1328	462	L.001	L.003	L.002	L.2	.060	L.009	L.004	L.002
83-06-13	1349	462	L.001	L.003	L.002	L.2	060	L.009	L.004	L.002
83-07-18	1200	462	L.001	L.003	L.002	L.2	.080	L.009	L.004	L.002
83-08-22	1237	462	L.001	L.003	L.002	L.2	.060	L.009	L.004	L.002
83-09-19	1215	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	.002
83-10-17	1200	462	L.001 25R	L.003 60R	L.002 65R	L.2 20W	.034 00W	L.009 50W	L.004 55W	.002 10W
83-11-14	1210	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-12-05	1120	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-24	1115	462	L.004 40W	L.2 01W	L.002 59R	L.002 60R	L.005 62R	L.002 64R	--	--
83-03-01	1040	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-29	1200	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-26	1350	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-24	1328	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-13	1349	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-18	1200	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-22	1237	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-09-19	1215	462	L.004	L.2	--	--	--	L.002	--	--
83-10-17	1200	462	L.004 40W	L.2 01W	--	--	--	L.002 64R	--	--
83-11-14	1210	462	L.004	L.2	--	--	--	L.002	--	--
83-12-05	1120	462	L.004	L.2	--	--	--	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00SA05KH0002 LAT. 53D 36M 05 LONG. 102D 7M 05
CARROT RIVER NEAR TURNBERRY, SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-25	1145	462	.0	17.8	2320.	2310.	7.5	7.2	11.0	9.4
83-03-02	0930	462	.0	19.1	2675.	2580.	7.4	7.2	9.0	8.1
83-03-30	1130	462	2.5	21.6	2655.	2650.	7.4	7.2	8.5	6.4
83-04-27	1724	462	4.0	18.5	408.	374.	7.7	7.6	624.0	270.0
83-05-25	1315	462	10.0	22.4	541.	544.	7.7	7.7	--	32.0
83-06-14	1050	462	14.0	13.9	529.	533.	7.6	7.7	110.0	74.0
83-07-19	1058	462	20.0	7.7	489.	492.	7.6	7.7	91.0	57.0
83-08-23	1255	462	20.0	22.3	959.	952.	7.8	7.8	13.0	5.5
83-09-20	1340	462	6.5	13.0 61R	462.	440. 41R	7.8	7.8 01R	128.0	51.0 73R
83-10-18	1122	462	1.0	14.3	645.	640.	7.8	7.8	14.0	6.5
83-11-15	1220	462	.5	17.3	824.	854.	7.9	7.8	12.0	6.4
83-12-06	1050	462	.0	7.2	1140.	1112.	7.4	7.3	11.0	8.1

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-25	1145	462	40.	8.	5	.002	L2.	L2.	--	1.0
83-03-02	0930	462	20	8.	5	L.001	L2.	L2.	--	1.2
83-03-30	1130	462	20.	5.	2.	.001	--	--	--	1.0
83-04-27	1724	462	100	720.	656.	.040	130.	L2.	--	9.6
83-05-25	1315	462	60	64.	59.	008	28.	6.	--	7.9
83-06-14	1050	462	80	148.	133.	.005	60.	40.	--	6.3
83-07-19	1058	462	100	106.	94.	.005	130.	38.	--	5.5
83-08-23	1255	462	60.	14	11	005	36.	6.	--	7.3
83-09-20	1340	462	60 21R	100. 01R	91 01R	005 17T	85. 02U	72. 12U	--	10.3
83-10-18	1122	462	60	8.	6.	L.001	34	20.	--	11.9
83-11-15	1220	462	50.	5.	3	004	28.	8.	--	12.9
83-12-06	1050	462	50.	14	14	005	16.	10.	--	6.4

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-25	1145	462	0	.0	433	355.0	122.0	43.4	483.3	370.0
83-03-02	0930	462	0	.0	439	360.0	112.0	42.4	454.2	380.0
83-03-30	1130	462	0	.0	421.	345.0	115.0	41.1	456.4	400.0
83-04-27	1724	462	0.	.0	128.	105.0	35.4	11.6	136.2	22.0
83-05-25	1315	462	0.	.0	183	150.0	48.1	18.3	195.4	35.0
83-06-14	1050	462	0.	.0	201	165.0	51.0	18.0	193.2	35.0
83-07-19	1058	462	0.	.0	207.	170.0	51.2	17.4	199.5	27.0
83-08-23	1255	462	0.	.0	274.	225.0	67.2	25.7	273.6	86.0
83-09-20	1340	462	0.	.0 51R	177	145.0 01R	42.8 03R	13.2 02R	161.2	31.0 03R
83-10-18	1122	462	0.	.0	201.	165.0 06L	48.7	17.2	192.4	53.0
83-11-15	1220	462	0.	.0	243.	199.0 06L	59.0	20.5	231.7	81.9
83-12-06	1050	462	0.	.0	286.	235.0 06L	76.7	26.4	300.2	133.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	03604P CYANIDE TOTAL CN MG/L
83-01-25	1145	462	12.0	535.0	.18	115.	17.0	1427.	L1.	.002
83-03-02	0930	462	12.0	600.0	.25	106.	18.0	1486	L1.	.001
83-03-30	1130	462	13.0	610.0	.15	110.	18.0	1514.	L1.	.002
83-04-27	1724	462	7.5	33.0	.10	28.	7.8	208.	--	.016
83-05-25	1315	462	6.0	43.0	.10	48.	7.6	296.	--	004
83-06-14	1050	462	3.9	47.0	.12	36.	12.0	300.	--	.003
83-07-19	1058	462	3.5	33.0	.11	28.	13.0	275.	--	.004
83-08-23	1255	462	5.5	138.0	.20	42.	14.0	513.	--	.009
83-09-20	1340	462	2.8 03R	42.0 06R	.08 05R	22. 06R	--	--	--	.004 04W
83-10-18	1122	462	3.8	86.0	.08 08L	29.	10.0 02L	347.	--	.003
83-11-15	1220	462	5.2	128.0	.14 08L	39.	9.2 02L	462.	--	.003
83-12-06	1050	462	7.0	207.0	.16 08L	61.	11.9 02L	664.	--	.003

STATION - 00SA05KH0002
CARROT RIVER NEAR TURNBERRY, SASKATCHEWAN LAT. 53D 38M 0S LONG. 102D 7M 0S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-25	1145	462	.031	.013	.018	L.003	.48	.45	.06	.51
83-03-02	0930	462	.034	.003	.031	L.003	.51	.51	.06	.57
83-03-30	1130	462	.029	.003	.026	L.003	.54	.55	.04	.59
83-04-27	1724	462	.410	--	--	L.003	1.80	1.90	1.60	3.50
83-05-25	1315	462	.077	.016	.061	L.003	.56	.55	.12	.67
83-06-14	1050	462	--	.020	--	L.003	.59	.59	.22	.81
83-07-19	1058	462	.140	.036	.104	.009	.72	.71	.22	.93
83-08-23	1255	462	.060	.023	.037	.003	.63	.65	.09	.74
83-09-20	1340	462	.100 06R	.011 03V	.089	L.003 56V	.49 51V	.49 51R	.23 02R	.72
83-10-18	1122	462	.030	.011	.019	L.003	.44	.44	.07	.51
83-11-15	1220	462	--	.010	--	L.003	.39	.40	.05	.45
83-12-06	1050	462	.028	.011	.017	L.003	.38	.36	.08	.42

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-25	1145	462	L.01	.4	10.0	.46	10.5	.32	.0009	L.0005
83-03-02	0930	462	.08	.3	9.0	.30	9.3	.29 05L	.0005	L.0005
83-03-30	1130	462	.14	.4	8.5	.23	8.7	.14	.0005	L.0005
83-04-27	1724	462	1.40	.3	11.0	12.00	23.0	.18	.0006	L.0005
83-05-25	1315	462	L.01	L.1	13.0	1.40	14.4	.15	L.0005	L.0005
83-06-14	1050	462	.02	L.1	17.0	5.30	22.3	.18	.0009	L.0005
83-07-19	1058	462	.08	L.1	19.0	1.90	20.9	.19	.0014 08D	L.0005 08D
83-08-23	1255	462	.02	L.1	22.0	.72	22.7	.26	.0019 08D	.0003 08D
83-09-20	1340	462	.03 10R	L.1 06W	14.0 04R	2.40 02R	16.4	.16 05V	.0021 08V	.0003 08V
83-10-18	1122	462	02	L.1	12.0	.48	12.5	.17	.0008 08D	.0002 08D
83-11-15	1220	462	.01	L.1	12.0	.39	12.4	.17	.0014 08D	.0001 08D
83-12-06	1050	462	.03	L.1	14.0	.49	14.5	.19	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-25	1145	462	.05	--	--	1.40	--	.27	L.02	L.001
83-03-02	0930	462	.03	--	--	1.00	--	.29	.03	L.001
83-03-30	1130	462	L.04	--	--	.83	--	.18	L.02	L.001
83-04-27	1724	462	2.00	--	--	.11	--	.07	L.02	.040
83-05-25	1315	462	.16	--	--	.12	--	.08	L.02	.002
83-06-14	1050	462	.63	--	--	.14	--	.12	.05	.012
83-07-19	1058	462	.42	--	--	.12	--	.14	.02	.008
83-08-23	1255	462	.43	--	--	.26	--	.22	L.02	.002 02P
83-09-20	1340	462	.64 02W	--	--	.17 04T	--	.09 04T	L.02 11W	.010 02W
83-10-18	1122	462	L.10	--	--	.14	--	.18	.16	.002 02P
83-11-15	1220	462	.12	--	--	.10	--	.14	L.02	.002 02P
83-12-06	1050	462	.13	--	--	.38	--	.21	L.02	L.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-25	1145	462	L.015	L.002	L.002	.001	L.001	L.001	.14	L.004
83-03-02	0930	462	L.015	L.002	L.002	L.001	.003	L.001	.16	L.004
83-03-30	1130	462	L.015	L.002	L.002	.006	--	L.001	.07	L.004
83-04-27	1724	462	L.015	.010	.032	.020	.083	L.001	.11	.007
83-05-25	1315	462	L.015	L.002	.003	.004	.007	L.001	.05	L.004
83-06-14	1050	462	L.015	L.002	.012	.007	.020	L.001	.06	L.004
83-07-19	1058	462	L.015	L.002	.006	.005	.005	L.001	.06	L.004
83-08-23	1255	462	--	L.001 02P	.004 02P	.002 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P
83-09-20	1340	462	--	L.001 02W	.006 02W	.005 05P	.009 05W	L.001 02W	L.10 01W	.002 02W
83-10-18	1122	462	L.001 03P	L.001 02P	.001 02P	.002 05P	L.001 05P	L.001 02P	.13 01P	L.001 02P
83-11-15	1220	462	.003 03P	L.001 02P	.002 02P	.001 05P	.001 05P	L.001 02P	L.10 01P	L.001 02P
83-12-06	1050	462	L.001 03P	L.001 02P	.003 02P	.002 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P

STATION - 00SA05KH0002
CARROT RIVER NEAR TURNBERRY, SASKATCHEWAN LAT. 53D 38M 05 LONG. 102D 7M 05

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-25	1145	462	.003	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-03-02	0930	462	.003	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-03-30	1130	462	.003	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-04-27	1724	462	.009	L.001	.001	.002	L.001	L.002	L.001	L.001
83-05-25	1315	462	.007	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-06-14	1050	462	.021	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-07-19	1058	462	.007	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-08-23	1255	462	.007	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-09-20	1340	462	.006 35W	L.001 11R	.001 75R	.001 70R	L.001 30R	L.002 10R	L.001 20R	L.001 05R
83-10-18	1122	462	.003	L.001	.005	.001	L.001	L.002	L.001	L.001
83-11-15	1220	462	.004	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-12-06	1050	462	--	L.001	.002	L.001	L.001	L.002	L.001	L.001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELORIN) UG/L
83-01-25	1145	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-02	0930	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-30	1130	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-27	1724	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-25	1315	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-14	1050	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-19	1058	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-23	1255	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-20	1340	462	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R
83-10-18	1122	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-11-15	1220	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-12-06	1050	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-25	1145	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-02	0930	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-30	1130	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-04-27	1724	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-25	1315	462	L.001	L.003	L.002	--	--	--	--	--
83-06-14	1050	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-07-19	1058	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-23	1255	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-09-20	1340	462	L.001 25R	L.003 60R	L.002 65R	L.2 20W	--	L.009 50W	L.004 55W	L.002 10W
83-10-18	1122	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-11-15	1220	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-12-06	1050	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZINPHOSMETHYL (GUTHION) UG/L	18195P AZINPHOSETHYL UG/L
83-01-25	1145	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-02	0930	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-03-30	1130	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-27	1724	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-25	1315	462	--	--	L.002	L.002	L.005	L.002	--	--
83-06-14	1050	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-19	1058	462	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-23	1255	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-09-20	1340	462	L.004 40W	L.2 01W	--	--	--	L.002 64R	--	--
83-10-18	1122	462	L.004	L.2	--	--	--	L.002	--	--
83-11-15	1220	462	L.004	L.2	--	--	--	L.002	--	--
83-12-06	1050	462	L.004	L.2	--	--	--	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 05SA05KH0003 LAT. 53D 49M 59S LONG. 102D 58M 25S
DRAGLINE CHANNEL BELOW WSC CONTROL STRUCTURE NR. SQUAW RAPID SASKATCHEWAN

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-10 1550 487	1.0	11.5	--	441.	--	7.9	--	1.5
83-03-07 1100 487	.5	19.3	--	405.	--	7.8	--	2.2
83-05-16 1030 487	1.0	23.2	283.	359.	8.2	8.0	--	6.4
83-06-06 0830 487	12.0	22.4	370.	392.	8.4	8.0	--	3.0
83-06-27 0830 487	17.0	19.9	369.	406.	--	8.0	--	6.5
83-07-18 0900 487	19.0	16.6	375.	386.	8.2	8.1	--	2.7
83-08-08 1000 487	21.0	26.0	419.	415.	--	8.0	--	1.6
83-08-15 1515 487	15.0	21.4	480.	457.	7.6	8.4	--	2.0
83-09-12 1200 487	19.0	21.9	439.	523.	7.4	7.6	--	5.4
83-10-03 1400 487	7.0	17.2	405.	528.	--	7.7	--	5.0
83-10-16 0415 487	4.5	17.9	--	470.	--	7.7	--	4.0
83-12-12 1130 487	.0	8.7	293.	415.	--	7.9	--	1.2

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	08717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-10 1550 487	20.	3.	--	.020	40.	L2.	--	13.9
83-03-07 1100 487	20.	3.	--	.001	10.	L2.	--	8.6
83-05-16 1030 487	30.	7.	--	.010	L2.	L2.	--	12.3
83-06-06 0830 487	20.	6.	--	.006	L2.	L2.	--	10.6
83-06-27 0830 487	20.	9	--	.002	L2.	L2.	--	8.4
83-07-18 0900 487	30.	3.	--	.001	--	--	--	7.8
83-08-08 1000 487	30.	4	--	.001	--	--	--	6.7
83-08-15 1515 487	20.	9.	--	.001	--	--	--	12.9
83-09-12 1200 487	30.	10.	--	.002	--	--	--	7.5
83-10-03 1400 487	30.	10.	--	.002	40.	20.	--	13.0
83-10-16 0415 487	10.	9.	--	L.001	--	--	--	9.0
83-12-12 1130 487	--	L1	--	L.001 11L	--	--	--	12.6

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-10 1550 487	0.	.0	213.	175.0	52.3	17.4	202.2	22.0
83-03-07 1100 487	0.	.0	189.	155.0	48.1	16.5	188.0	18.0
83-05-16 1030 487	0.	.0	152.	125.0	37.1	12.8	145.3	16.0
83-06-06 0830 487	0.	.0	171.	140.0	40.8	14.5	161.6	18.0
83-06-27 0830 487	0.	.0	177.	145.0	42.1	14.8	166.1	19.0
83-07-18 0900 487	0.	.0	165.	135.0	41.9	15.1	166.8	15.0
83-08-08 1000 487	0.	.0	171.	140.0	42.0	15.8	169.9	20.0
83-08-15 1515 487	0.	.0	213.	175.0	46.4	19.4	195.7	23.0
83-09-12 1200 487	0.	.0	274.	225.0	58.7	22.3	238.4	24.0
83-10-03 1400 487	0.	.0	268.	220.0	57.6	22.0	234.4	26.0
83-10-16 0415 487	0.	.0	207.	170.0 06L	47.9	17.6	192.1	27.0
83-12-12 1130 487	0.	.0	191.	157.0 06L	45.8	16.8	183.5	22.0

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-10 1550 487	2.8	10.0	.15	59.	1.6	270.	--	--
83-03-07 1100 487	2.3	6.8	.08	52.	3.4	240.	--	--
83-05-16 1030 487	2.7	6.7	.09	46.	3.6	200.	--	--
83-06-06 0830 487	2.8	9.3	.16	42.	1.2	213.	--	--
83-06-27 0830 487	2.6	9.8	.11	44.	2.2	222.	--	--
83-07-18 0900 487	2.3	6.3	.12	47.	1.8	210.	--	--
83-08-08 1000 487	2.7	7.8	.13	57.	2.9	232.	--	--
83-08-15 1515 487	3.0	11.0	.18	53.	3.1	264.	--	--
83-09-12 1200 487	3.1	13.0	.11	41.	3.9	301.	--	--
83-10-03 1400 487	3.7	12.0	.11	47.	2.2	303.	--	--
83-10-16 0415 487	3.1	14.0	.16 08L	55.	2.8 02L	269.	--	--
83-12-12 1130 487	2.7	9.8	.18 08L	59.	1.0 02L	251.	--	--

STATION - 00SA05KH0003 LAT. 53D 49M 59S LONG. 102D 56M 25S
DRAGLINE CHANNEL BELOW WSC CONTROL STRUCTURE NR. SQUAW RAPID SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-10	1550	487	.150	--	--	--	--	45	06	.51
83-03-07	1100	487	.037	--	015	--	--	.51	03	.54
83-05-16	1030	487	.045	--	--	--	--	--	--	--
83-06-06	0830	487	056	--	--	--	--	--	--	--
83-06-27	0830	487	.032	--	--	--	--	33	.14	47
83-07-18	0900	487	030	--	--	--	--	25	.02	27
83-08-08	1000	487	.022	--	--	--	--	.31	03	34
83-08-15	1515	487	.027	--	--	--	--	29	07	.36
83-09-12	1200	487	036	--	--	--	--	31	.09	.40
83-10-03	1400	487	.047	--	--	--	--	39	.24	63
83-10-16	0415	487	047	--	--	--	--	37	19	.56
83-12-12	1130	487	.020	--	--	--	--	48	.06	.54

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-10	1550	487	.17	L.1	4.4	72	5.*	--	0005 04L	--
83-03-07	1100	487	.35	L.1	3.0	20	3.2	--	0007 04L	--
83-05-16	1030	487	--	L.1	--	--	--	--	0005 04L	--
83-06-06	0830	487	--	L.1	--	--	--	--	L.0005 04L	--
83-06-27	0830	487	.02	L.1	5.3	90	6.2	--	0007 04L	--
83-07-18	0900	487	.06	L.1	5.0	15	5.2	--	0009 08L	--
83-08-08	1000	487	.03	L.1	5.4	17	5.6	--	0013 08L	--
83-08-15	1515	487	L.01	L.1	6.5	45	7.0	--	--	--
83-09-12	1200	487	.01	L.1	5.7	51	6.2	--	0025 08L	--
83-10-03	1400	487	L.01	L.1	7.0	1.20	8.2	--	.0006 08L	--
83-10-16	0415	487	.01	L.1	6.9	1.00	7.9	--	0020 08L	--
83-12-12	1130	487	.10	.1	6.1	.28	6.4	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-10	1550	487	--	--	.02	--	.05	--	--	--
83-03-07	1100	487	--	--	.01	--	L.04	--	--	--
83-05-16	1030	487	--	--	02	--	.16	--	--	--
83-06-06	0830	487	--	--	.08	--	.17	--	--	--
83-06-27	0830	487	--	--	10	--	.31	--	--	--
83-07-18	0900	487	--	--	02	--	18	--	--	--
83-08-08	1000	487	--	--	.07	--	17	--	--	--
83-10-03	1400	487	--	--	.17	--	65	--	--	--
83-10-16	0415	487	--	--	L.01	--	L.04	--	--	--
83-12-12	1130	487	--	--	L.02	--	.05	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-10	1550	487	--	--	--	.001	--	--	--	L.004
83-03-07	1100	487	--	--	--	.002	--	--	--	L.004
83-05-16	1030	487	--	--	--	.002	--	--	--	L.004
83-06-06	0830	487	--	--	--	.002	--	--	--	L.004
83-06-27	0830	487	--	--	--	.002	--	--	--	L.004
83-07-18	0900	487	--	--	--	.001	--	--	--	L.004
83-08-08	1000	487	--	--	--	.001 05P	--	--	--	L.004 02P
83-09-12	1200	487	--	--	--	.002 05P	--	--	--	.002 02P
83-10-03	1400	487	--	--	--	.003 05P	--	--	--	L.001 02P
83-10-16	0415	487	--	--	--	002 05P	--	--	--	L.001 02P
83-12-12	1130	487	--	--	--	.010 05P	--	--	--	.001 02P

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 005A05KH0003 LAT. 53D 49M 59S LONG. 102D 58M 25S
DRAGLINE CHANNEL BELOW WSC CONTROL STRUCTURE NR. SQUAW RAPID SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18136 ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-10	1550	487	.002	--	--	--	--	--	--	--
83-03-07	1100	487	L.001	--	--	--	--	--	--	--
83-05-16	1030	487	.002	--	--	--	--	--	--	--
83-06-06	0830	487	.004	--	--	--	--	--	--	--
83-06-27	0830	487	.004	--	--	--	--	--	--	--
83-07-18	0900	487	.004	--	--	--	--	--	--	--
83-08-15	1515	487	.007	--	--	--	--	--	--	--
83-09-12	1200	487	.002	--	--	--	--	--	--	--
83-10-03	1400	487	.004	--	--	--	--	--	--	--
83-10-16	0415	487	.007	--	--	--	--	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00SA05KH0004 LAT. 53D 49M 59S LONG. 101D 57M 23S
. BIRCH RIVER BELOW CUMBERLAND MARSHES DAM, NR. CUMBERLAND HOUSE, SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-10	1130	487	1.0	12.5	--	585.	6.8	7.3	--	2.2
83-03-07	1500	487	.5	19.1	--	927.	--	7.2	--	25.0
83-05-16	1200	487	4.0	23.2	520.	870.	7.8	7.6	--	7.8
83-06-06	1530	487	15.0	22.2	--	807.	8.1	7.7	--	3.0
83-06-27	1500	487	19.0	20.1	695.	728.	8.0	8.1	--	3.0
83-07-18	1430	487	19.0	16.6	524.	511.	7.6	7.5	--	1.3
83-08-08	1230	487	23.0	25.9	518.	500	--	7.7	--	2.5
83-08-15	1245	487	15.0	20.9	554.	513	7.1	7.7	--	3.5
83-09-12	1200	487	18.5	21.7	440.	537	--	7.9	--	1.8
83-10-03	1045	487	8.0	16.9	453.	507	7.8	7.8	--	2.1
83-10-16	1135	487	5.5	15.8	441.	506.	8.3	7.8	--	2.5
83-12-12	1145	487	0	8.8	358.	496.	--	7.6	--	1.4

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-10	1130	487	30.	3.	--	.004	L2	L2	--	4.5
83-03-07	1500	487	240.	20.	--	.003	12.	6.	--	8.3
83-05-16	1200	487	50.	11.	--	.030	L2	L2	--	11.0
83-06-06	1530	487	60	2	--	.004	L2	L2	--	9.0
83-06-27	1500	487	60	--	--	.002	L2	L2	--	11.0
83-07-18	1430	487	50.	3.	--	.001	--	--	--	9.0
83-08-08	1230	487	70.	3	--	.008	--	--	--	7.0
83-08-15	1245	487	60.	5.	--	.004	--	--	--	10.1
83-09-12	1200	487	50.	2.	--	.010	--	--	--	9.5
83-10-03	1045	487	50.	2.	--	.002	300.	56	--	8.9
83-10-16	1135	487	50.	2	--	.001	--	--	--	9.8
83-12-12	1145	487	--	2.	--	.001 11L	--	--	--	11.2

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-10	1130	487	0	0	244.	200.0	52.2	22.7	223.8	40.0
83-03-07	1500	487	0.	0	402.	330.0	84.5	37.5	365.4	--
83-05-16	1200	487	0.	0	372.	305.0	76.6	31.0	318.9	55.0
83-06-06	1530	487	0.	0	341.	280.0	71.7	29.0	298.4	50.0
83-06-27	1500	487	0.	0	305.	250.0	62.8	25.5	261.8	47.0
83-07-18	1430	487	0.	0	177.	145.0	36.3	18.5	166.8	40.0
83-08-08	1230	487	0.	0	165.	135.0	31.3	18.8	155.6	42.0
83-08-15	1245	487	0.	0	171.	140.0	32.2	19.7	161.5	45.0
83-09-12	1200	487	0.	0	183.	150.0	34.9	19.5	167.4	44.0
83-10-03	1045	487	0.	0	219.	180.0	41.3	21.8	192.9	47.0
83-10-16	1135	487	0.	0	219.	180.0 06L	43.1	22.4	199.8	44.0
83-12-12	1145	487	0.	0	213.	175.0 06L	43.0	20.6	192.2	42.4

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	1F306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-10	1130	487	5.3	62.0	.15	26.	2.9	331.	--	--
83-03-07	1500	487	8.0	--	--	24.	9.2	--	--	--
83-05-16	1200	487	7.2	90.0	.13	9.	12.0	464.	--	--
83-06-06	1530	487	6.9	84.0	.19	11.	10.0	431.	--	--
83-06-27	1500	487	6.2	76.0	.13	6.	6.2	379.	--	--
83-07-18	1430	487	4.0	68.0	.11	5.	4.4	263.	--	--
83-08-08	1230	487	3.9	67.0	.13	5.	8.7	258.	--	--
83-08-15	1245	487	4.2	75.0	.13	6.	11.0	277.	--	--
83-09-12	1200	487	4.9	75.0	.11	--	8.2	--	--	--
83-10-03	1045	487	5.3	80.0	.10	9.	8.8	321.	--	--
83-10-16	1135	487	4.8	84.0	.12 08L	9.	8.9 02L	325.	--	--
83-12-12	1145	487	5.2	65.0	.15 08L	13.	4.2 02L	298.	L1.	--

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 00SA05KH0004 LAT. 53D 49M 59S LONG. 101D 57M 23S
BIRCH RIVER BELOW CUMBERLAND MARSHES DAM, NR. CUMBERLAND HOUSE, SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-10	1130	487	.076	--	--	--	--	.78	.10	.88
83-03-07	1500	487	.280	--	.170	--	--	1.10	.30	1.40
83-05-16	1200	487	.096	--	--	--	--	--	--	--
83-06-06	1530	487	.120	--	--	--	--	--	--	--
83-06-27	1500	487	--	--	--	--	--	.76	.03	.79
83-07-18	1430	487	.043	--	--	--	--	.78	.04	.82
83-08-08	1230	487	.043	--	--	--	--	.89	.11	1.00
83-08-15	1245	487	.070	--	--	--	--	.87	.15	1.02
83-09-12	1200	487	.046	--	--	--	--	1.00	.13	1.13
83-10-03	1045	487	.040	--	--	--	--	1.10	.13	1.23
83-10-16	1135	487	.033	--	--	--	--	1.10	.17	1.27
83-12-12	1145	487	.028	--	--	--	--	.96	.08	1.04

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-10	1130	487	.02	.3	12.0	.62	12.6	--	L.0005 04L	--
83-03-07	1500	487	L.01	.7	19.0	1.90	20.9	--	.0021 04L	--
83-05-16	1200	487	--	L.1	--	--	--	--	L.0005 04L	--
83-06-06	1530	487	--	L.1	--	--	--	--	L.0005 04L	--
83-06-27	1500	487	.01	L.1	16.0	.24	16.2	--	--	--
83-07-18	1430	487	.01	L.1	16.0	.30	16.3	--	.0005 08L	--
83-08-08	1230	487	L.01	L.1	18.0	.67	18.7	--	.0007 08L	--
83-08-15	1245	487	.01	L.1	21.0	.97	22.0	--	--	--
83-09-12	1200	487	.02	.1	19.0	.94	19.9	--	.0019 08L	--
83-10-03	1045	487	.05	.4	20.0	.79	20.8	--	.0021 08L	--
83-10-16	1135	487	.07	.3	18.0	1.00	19.0	--	.0023 08L	--
83-12-12	1145	487	.14	.3	25.0	.48	25.5	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-10	1130	487	--	--	.31	--	.34	--	--	--
83-03-07	1500	487	--	--	.96	--	6.90	--	--	--
83-05-16	1200	487	--	--	.10	--	2.00	--	--	--
83-06-06	1530	487	--	--	.21	--	.26	--	--	--
83-07-18	1430	487	--	--	.07	--	.48	--	--	--
83-08-08	1230	487	--	--	.13	--	.75	--	--	--
83-10-03	1045	487	--	--	.14	--	.33	--	--	--
83-10-16	1135	487	--	--	.11	--	.32	--	--	--
83-12-12	1145	487	--	--	.04	--	.14	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-10	1130	487	--	--	--	L.001	--	--	--	L.004
83-03-07	1500	487	--	--	--	L.001	--	--	--	L.004
83-05-16	1200	487	--	--	--	L.001	--	--	--	L.004
83-06-06	1530	487	--	--	--	L.001	--	--	--	L.004
83-07-18	1430	487	--	--	--	.001	--	--	--	L.004
83-08-08	1230	487	--	--	--	L.001 05P	--	--	--	L.004 02P
83-09-12	1200	487	--	--	--	L.001 05P	--	--	--	.002 02P
83-10-03	1045	487	--	--	--	.001 05P	--	--	--	L.001 02P
83-10-16	1135	487	--	--	--	.002 05P	--	--	--	.003 02P
83-12-12	1145	487	--	--	--	.003 05P	--	--	--	.001 02P

STATION - 00SA05KH0004 LAT. 53D 49M 59S LONG. 101D 57M 23S
BIRCH RIVER BELOW CUMBERLAND MARSHES DAM. NR. CUMBERLAND HOUSE, SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L DRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-10	1130	487	.004	--	--	--	--	--	--	--
83-03-07	1500	487	.005	--	--	--	--	--	--	--
83-05-15	1200	487	.009	--	--	--	--	--	--	--
83-06-06	1530	487	.008	--	--	--	--	--	--	--
83-07-18	1430	487	.009	--	--	--	--	--	--	--
83-08-15	1245	487	.009	--	--	--	--	--	--	--
83-09-12	1200	487	.005	--	--	--	--	--	--	--
83-10-03	1045	487	.005	--	--	--	--	--	--	--
83-10-16	1135	487	.006	--	--	--	--	--	--	--
83-12-12	1145	487	.011	--	--	--	--	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 05SA05LC0001
RED DEER RIVER AT ERWOOD, SASKATCHEWAN LAT. 52D 52M 05 LONG. 102D 10M 59S

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-25 0900	462	.0	18.9	788.	756.	7.6	7.4	2.2	1.7
83-03-01 1630	462	.0	23.5	764.	731.	7.7	7.5	--	1.6
83-03-30 0815	462	.5	21.6	816.	683.	7.8	7.5	1.8	1.0
83-04-27 1436	462	3.0	19.2	302.	297.	7.8	7.6	52.0	30.0
83-05-25 0954	462	10.0	22.5	456.	458.	8.1	8.0	11.0	5.0
83-06-14 0720	462	15.0	13.2	503.	494.	8.0	8.0	26.0	21.0
83-07-19 0715	462	20.0	7.0	448.	445.	8.0	7.9	22.0	15.0
83-08-23 0700	462	17.0	22.7 61R	465.	432. 41R	8.4	8.4 01R	4.6	1.5 73R
83-09-20 0735	462	6.0	14.0	335.	307.	8.2	8.2	4.9	2.8
83-10-18 0717	462	.5	11.6	301.	305.	8.3	8.1	3.2	2.1
83-11-15 0830	462	.5	17.9	354.	354.	8.2	8.0	3.6	2.2
83-12-06 0825	462	.0	5.4	490.	495.	7.9	7.7	2.4	1.9

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED 00 02 MG/L
83-01-25 0900	462	30.	2.	L1.	L.001	L2.	L2	--	8.7
83-03-01 1630	462	20.	2.	L1.	L.001	L2.	L2	--	9.4
83-03-30 0815	462	20.	2.	L1.	.001	--	--	--	10.0
83-04-27 1436	462	120.	53.	49.	.010	70.	14.	--	11.4
83-05-25 0954	462	70.	9.	7.	.005	22.	4.	--	9.1
83-06-14 0720	462	80.	32.	25.	.003	L2.	L2.	--	8.2
83-07-19 0715	462	120.	51.	43.	.003	100.	42.	--	7.2
83-08-23 0700	462	50. 21R	2. 01R	L1. 01R	.002 17T	160. 02U	20. 12U	--	7.6
83-09-20 0735	462	60.	3.	1.	.002	120.	52.	--	11.0
83-10-18 0717	462	80.	1.	1	L.001	8.	4	--	12.7
83-11-15 0830	462	50.	32.	29.	.002	60.	L2.	--	13.2
83-12-06 0825	462	40.	2.	2.	L.001	16.	L2.	--	11.7

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	08201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-25 0900	462	0.	.0	433.	355.0	109.0	34.7	415.0	22.0
83-03-01 1630	462	0.	.0	402.	330.0	92.9	37.4	385.9	18.0
83-03-30 0815	462	0.	.0	378.	310.0	88.3	35.5	366.6	20.0
83-04-27 1436	462	0.	.0	121.	99.0	36.5	12.9	144.2	6.7
83-05-25 0954	462	0.	.0	189.	155.0	48.3	22.2	212.0	15.0
83-06-14 0720	462	0.	.0	213.	175.0	53.7	24.0	232.9	17.0
83-07-19 0715	462	0.	.0	226.	185.0	53.0	22.5	225.0	12.0
83-08-23 0700	462	3.	2.1 51R	226.	190.0 01R	51.7 03R	23.3 02R	225.0	10.0 03R
83-09-20 0735	462	0.	.0	183.	150.0	40.1	14.8	161.1	6.4
83-10-18 0717	462	0.	.0	177.	145.0 08L	39.5	14.9	160.0	7.2
83-11-15 0830	462	0.	.0	211.	173.0 08L	45.2	16.9	182.4	7.5
83-12-06 0825	462	0.	.0	258.	212.0 08L	63.1	24.6	258.8	12.1

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-25 0900	462	6.1	7.1	.12	95.	21.0	509.	--	.003
83-03-01 1630	462	5.3	6.6	.15	78.	20.0	456.	--	.005
83-03-30 0815	462	5.1	6.1	.08	76.	20.0	437.	--	.006
83-04-27 1436	462	6.3	3.9	.08	44.	7.8	178.	--	.013
83-05-25 0954	462	4.6	4.4	.09	70.	6.8	264.	--	.004
83-06-14 0720	462	4.0	4.5	.11	76.	9.0	293.	--	.004
83-07-19 0715	462	3.5	3.5	.10	42.	16.0	264.	--	.005
83-08-23 0700	462	3.8 03R	3.8 06R	.16 05R	40. 06R	--	--	--	.007 04W
83-09-20 0735	462	1.8	.5	.05	19.	10.0	183.	--	.003
83-10-18 0717	462	1.5	2.3	.07 08L	24.	8.5 02L	185.	--	.004
83-11-15 0830	462	2.2	2.3	.10 08L	25.	7.6 02L	210.	--	.003
83-12-06 0825	462	3.2	3.5	.12 08L	54.	11.1 02L	299.	--	.003

STATION - 00SA05LC0001
RED DEER RIVER AT ERWOOD, SASKATCHEWAN LAT. 52D 52M 05 LONG. 102D 10M 59S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-25	0900	462	.013	.012	L.006	L.003	.94	.73	.03	.75
83-03-01	1630	462	.014	.007	.007	L.003	.78	.84	L.01	Q.85
83-03-30	0815	462	.015	.008	.007	L.003	.79	.78	.02	.80
83-04-27	1436	462	.190	.075	.115	.028	1.70	1.70	.44	2.14
83-05-25	0954	462	.042	.022	.020	L.003	.67	.64	.11	.75
83-06-14	0720	462	.067	--	--	.006	.70	.72	.21	.93
83-07-19	0715	462	.100	.062	.038	.019	.93	.93	.12	1.05
83-08-23	0700	462	.024 06R	.016 03V	.008	.003 56V	.65 51V	.65 51R	.06 02R	.71
83-09-20	0735	462	.019	.011	.008	L.003	.53	.52	L.01	Q.53
83-10-18	0717	462	.017	.010	.007	L.003	.42	.40	L.01	Q.41
83-11-15	0830	462	.011	.010	L.006	L.003	.41	.43	.03	.46
83-12-06	0825	462	.012	.009	L.006	L.003	.35	.35	L.01	Q.36

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-25	0900	462	.47	1	15.0	25	15.3	.12	L.0005	L.0005
83-03-01	1630	462	.40	L.1	11.0	18	11.2	06 05L	L.0005	L.0005
83-03-30	0815	462	.44	L.1	11.0	16	11.2	L.02	L.0005	L.0005
83-04-27	1436	462	1.10	.2	14.0	2.80	16.8	.20	.0009	L.0005
83-05-25	0954	462	L.01	L.1	17.0	.82	17.8	.14	.0005	L.0005
83-06-14	0720	462	L.01	L.1	20.0	2.00	22.0	.19	.0010	L.0005
83-07-19	0715	462	.05	L.1	27.0	1.10	28.1	.21	.0018 08D	L.0005 08D
83-08-23	0700	462	L.01 10R	L.1 06W	12.0 04R	36 02R	12.4	.17 05V	.0023 08V	.0003 08V
83-09-20	0735	462	L.01	L.1	17.0	.18	17.2	.15	.0019 08D	.0002 08D
83-10-18	0717	462	L.01	L.1	15.0	.22	15.2	15	.0017 08D	.0003 08D
83-11-15	0830	462	.01	L.1	14.0	18	14.2	15	.0006 08D	L.0001 08D
83-12-06	0825	462	L.01	L.1	18.0	37	18.4	.15	.0022 08D	.0002 08D
	0825	462	--	--	--	--	--	--	.0022 08L	.0002 08L

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-25	0900	462	.04	--	--	.02	--	.05	L.02	L.001
83-03-01	1630	462	L.02		--	.01	--	.05	L.02	L.001
83-03-30	0815	462	L.04	--	--	.01	--	L.04	L.02	L.001
83-04-27	1436	462	.29	--	--	.05	--	.20	L.02	.007
83-05-25	0954	462	.06	--	--	.12	--	.13	L.02	L.001
83-06-14	0720	462	.10	--	--	.10	--	.11	L.02	.002
83-07-19	0715	462	.09	--	--	.09	--	.20	L.02	.002
83-08-23	0700	462	.19 02W	--	--	.12 04T	--	.10 04T	L.02 11W	.001 02W
83-09-20	0735	462	.10	--	--	.12	--	.10	L.02	L.001 02P
83-10-18	0717	462	L.10	--	--	.11	--	.13	L.02	L.001 02P
83-11-15	0830	462	L.10	--	--	L.02	--	.14	L.02	L.001 02P
83-12-06	0825	462	L.10	--	--	L.02	--	.13	L.02	.002 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-25	0900	462	L.015	L.002	.002	.001	.002	L.001	.06	L.004
83-03-01	1630	462	L.015	L.002	.003	001	.008	L.001	L.05	L.004
83-03-30	0815	462	L.015	L.002	L.002	004	--	L.001	.06	L.004
83-04-27	1436	462	L.015	.002	.002	.004	--	L.001	L.05	L.004
83-05-25	0954	462	L.015	L.002	L.002	.003	.004	L.001	L.05	L.004
83-06-14	0720	462	L.015	L.002	L.002	.001	.006	L.001	L.05	L.004
83-07-19	0715	462	L.015	L.002	L.002	.002	.002	L.001	.05	L.004
83-08-23	0700	462	--	L.001 02W	.002 02W	.002 05P	.001 05W	L.001 02W	L.10 01W	L.001 02W
83-09-20	0735	462	--	L.001 02P	.002 02P	.002 05P	.002 05P	L.001 02P	L.10 01P	L.001 02P
83-10-18	0717	462	L.001 03P	L.001 02P	L.001 02P	L.001 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P
83-11-15	0830	462	L.001 03P	L.001 02P	L.001 02P	L.001 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P
83-12-06	0825	462	L.001 03P	L.001 02P	.002 02P	L.001 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P

STATION - 05SA05LC0001
RED DEER RIVER AT ERWOOD, SASKATCHEWAN LAT. 52D 52M 05 LONG. 102D 10M 59S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-25 0900 462	.003	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-03-01 1630 462	.003	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-03-30 0815 462	.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-04-27 1436 462	.013	L.001	.003	.003	L.001	L.002	L.001	L.001
83-05-25 0954 462	.007	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-06-14 0720 462	.009	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-07-19 0715 462	.009	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-08-23 0700 462	.007 35W	L.001 11R	L.001 75R	L.001 70R	L.001 30R	L.002 10R	L.001 20R	L.001 05R
83-09-20 0735 462	.007	L.001	.004	.001	L.001	L.002	L.001	L.001
83-10-18 0717 462	.005	L.001	.004	.001	L.001	L.002	L.001	L.001
83-11-15 0830 462	.004	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-12-06 0825 462	--	L.001	.001	L.001	L.001	L.002	L.001	L.001

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-25 0900 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-01 1630 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-30 0815 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-27 1436 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-25 0954 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-14 0720 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-19 0715 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-23 0700 462	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R
83-09-20 0735 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-18 0717 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-11-15 0830 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-12-06 0825 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-25 0900 462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-01 1630 462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-30 0815 462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-04-27 1436 462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-25 0954 462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-06-14 0720 462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-07-19 0715 462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-23 0700 462	L.001 25R	L.003 60R	L.002 65R	L.2 20W	L.004 00W	L.009 50W	L.004 55W	L.002 10W
83-09-20 0735 462	L.001	L.003	L.002	--	--	--	--	--
83-10-18 0717 462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-11-15 0830 462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-12-06 0825 462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-25 0900 462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-03-01 1630 462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-03-30 0815 462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-04-27 1436 462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-05-25 0954 462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-06-14 0720 462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-07-19 0715 462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-08-23 0700 462	L.004 40W	--	L.002 59R	L.002 60R	L.005 62R	L.002 64R	--	--
83-09-20 0735 462	--	--	--	--	--	L.002	--	--
83-10-18 0717 462	L.004	--	--	--	--	L.002	--	--
83-11-15 0830 462	L.004	--	--	--	--	L.002	--	--
83-12-06 0825 462	L.004	--	--	--	--	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00SA05MD0002
ASSINIBOINE RIVER AT HWY 8 BRIDGE BELOW KAMSACK, SASKATCHEWAN LAT. 510 31M 58S LONG. 1010 53M 20S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-24 1515 482	0	17.8	1158.	1110.	7.6	7.5	6.7	2.8
83-03-01 1300 482	.0	23.8	1128.	1130.	7.6	7.4	--	4.0
83-03-29 1615 482	0	21.9	1128.	1120.	7.6	7.5	5.8	2.5
83-04-27 0700 482	5.0	20.3 51R	416.	371. 41R	7.6	7.6 01R	124.0	58.0 73R
83-05-24 1654 482	13.0	22.8	788.	809.	8.1	8.0	29.0	14.0
83-06-13 1649 482	18.0	12.9	857.	889.	8.1	8.1	20.0	16.0
83-07-18 1520 482	24.0	11.0	860.	876.	8.0	8.1	18.0	12.0
83-08-22 1540 482	19.0	22.7	883.	888.	8.2	8.1	20.0	8.2
83-09-19 1500 482	9.0	15.1	846.	838.	8.1	8.1	16.0	6.2
83-10-17 1730 482	4.0	11.4	833.	862.	8.1	7.8	6.4	3.2
83-11-14 1545 482	1.0	17.0	869.	907.	8.3	8.0	6.2	2.9
83-12-05 1420 482	.2	5.5	935.	899.	7.8	7.8	8.4	4.4

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	08717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-24 1515 482	20.	11	9.	L.001	4	L2	--	7.2
83-03-01 1300 482	20	12	10	.001	8	2	--	7.0
83-03-29 1615 482	20	7	5	.001	--	--	--	7.4
83-04-27 0700 482	70 21R	156 01R	136 01R	.010 17T	220 02U	150 12U	--	8.7
83-05-24 1654 482	60	36	30.	.010	14.	12.	--	8.5
83-06-13 1649 482	40	21	17.	.010	L2	L2	--	7.7
83-07-18 1520 482	60.	15	12.	.010	90.	34	--	7.1
83-08-22 1540 482	40.	17	14	.010	60	30	--	8.2
83-09-19 1500 482	20.	9.	7.	.005	80	22.	--	10.1
83-10-17 1730 482	30	5	3.	.005	12	6	--	9.7
83-11-14 1545 482	20.	L1	L1	.008	4	2	--	12.5
83-12-05 1420 482	25.	7	6	.005	20	4	--	10.7

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-24 1515 482	0	0	561.	460.0	145.0	64.0	625.6	50.0
83-03-01 1300 482	0.	0	536.	440.0	132.0	58.0	568.4	42.0
83-03-29 1615 482	0.	.0	512.	420.0	120.0	58.0	538.4	50.0
83-04-27 0700 482	0.	0 51R	115.	94.0 01R	38.7 03R	16.8 02R	150.8	12.0 03R
83-05-24 1654 482	0.	0	268.	220.0	78.1	41.0	363.8	33.0
83-06-13 1649 482	0.	0	366.	300.0	88.9	45.7	414.2	38.0
83-07-18 1520 482	0	0	347.	285.0	81.0	48.7	402.8	43.0
83-08-22 1540 482	0.	0	384.	315.0	87.5	50.0	424.3	38.0
83-09-19 1500 482	0.	0	384.	315.0	85.9	46.7	406.8	36.0
83-10-17 1730 482	0.	0	390.	320.0 06L	93.8	45.7	438.8	38.0
83-11-14 1545 482	0	0	324.	266.0 06L	107.0	46.6	459.0	36.1
83-12-05 1420 482	0.	0	400.	328.0 06L	116.0	52.3	505.0	44.5

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-24 1515 482	10.0	20.0	.17	220.	23.0	808.	--	.003
83-03-01 1300 482	9.4	19.0	.18	192.	26.0	742.	--	.003
83-03-29 1615 482	9.9	23.0	.12	200.	25.0	738.	--	.007
83-04-27 0700 482	9.1 03R	6.5 06R	.11 05R	75. 06R	--	--	--	.018 04W
83-05-24 1654 482	9.8	15.0	.11	184.	7.6	501.	--	.004
83-06-13 1649 482	9.6	18.0	.17	156.	8.0	545.	--	.004
83-07-18 1520 482	10.0	13.0	.16	163.	19.0	549.	--	.007
83-08-22 1540 482	8.8	14.0	.20	155.	17.0	562.	--	.008
83-09-19 1500 482	8.2	11.0	.17	148.	17.0	542.	--	.006
83-10-17 1730 482	7.8	11.0	.14 08L	160.	15.0 02L	567.	--	.005
83-11-14 1545 482	7.9	9.4	.15 08L	191.	9.3 02L	587.	--	.003
83-12-05 1420 482	9.6	14.3	.18 08L	209.	10.5 02L	653.	--	.002

STATION - 05SA005MB0002 LAT. 51D 31M 59S LONG. 101D 53M 20S
ASSINIBOINE RIVER AT HWY 8 BRIDGE BELOW KAMSACK, SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15405L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-24	1515	462	.045	.030	.015	.014	.66	.64	.06	.70
83-03-01	1300	462	.051	.030	.021	.020	.79	.80	.08	.88
83-03-29	1615	462	.068	.040	.028	.009	.90	.91	.05	.96
83-04-27	0700	462	.310 06R	120 03V	190	.070 56V	2.20 51V	2.20 51R	.77 02R	2.97
83-05-24	1654	462	.130	.058	.072	.012	.75	.75	.29	1.04
83-06-13	1649	462	.150	.078	.072	.072	.73	.72	.21	.93
83-07-18	1520	462	.350	.290	.060	.270	.99	.99	--	--
83-08-22	1540	462	.200	.140	.060	.090	.70	.69	.23	.92
83-09-19	1500	462	.110	.071	.039	.040	.74	.75	.06	.81
83-10-17	1730	462	.087	.050	.037	.027	.56	.54	.08	.62
83-11-14	1545	462	.059	.035	.024	.014	.48	.48	.07	.55
83-12-06	1420	462	.052	.036	.016	.008	.49	.49	.05	.54

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07505P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-24	1515	462	.14	.4	11.0	.47	11.5	16	.0010	L.0005
83-03-01	1300	462	.35	.2	10.0	.57	10.6	11 05L	.0010	L.0005
83-03-29	1615	462	.46	.2	10.0	.33	10.3	17	.0008	L.0005
83-04-27	0700	462	1.70 10R	.4 08W	9.5 04R	5.60 02R	15.1	19 05V	.0021 04V	.0007 02V
83-05-24	1654	462	L.01	L.1	14.0	2.20	16.2	15	.0014	L.0005
83-06-13	1649	462	L.01	L.1	15.0	1.40	16.4	17	.0025	L.0005
83-07-18	1520	462	.19	L.1	15.0	--	--	17	.0056 08D	L.0005 08D
83-08-22	1540	462	L.01	L.1	15.0	1.40	16.4	18	.0065 08D	.0004 08D
83-09-19	1500	462	.05	L.1	13.0	.36	13.4	16	.0049 08D	.0005 08D
83-10-17	1730	462	L.01	L.1	11.0	.71	11.7	18	.0037 08D	.0005 08D
83-11-14	1545	462	.01	L.1	8.4	.41	8.8	15	.0023 08D	.0003 08D
83-12-06	1420	462	.02	L.1	12.0	.34	12.3	16	.0027 08D	.0003 08D
	1420	462	--	--	--	--	--	--	.0027 08L	.0003 08L

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-24	1515	462	.04	--	--	.24	--	L.04	L.02	L.001
83-03-01	1300	462	.02	--	--	.20	--	.05	L.02	L.001
83-03-29	1615	462	.04	--	--	.20	--	L.04	L.02	L.001
83-04-27	0700	462	.50 02W	--	--	.12 04T	--	.09 04T	L.02 11W	.013 20W
83-05-24	1654	462	.11	--	--	.10	--	.05	L.02	002
83-06-13	1649	462	.09	--	--	.15	--	.04	L.02	.002
83-07-18	1520	462	.14	--	--	.19	--	.59	L.02	.005
83-08-22	1540	462	2.60	--	--	.13	--	.10	L.02	.004 02P
83-09-19	1500	462	.15	--	--	.36	--	L.04	L.02	.002 02P
83-10-17	1730	462	L.10	--	--	.24	--	L.04	L.02	.001 02P
83-11-14	1545	462	.13	--	--	.10	--	L.04	L.02	.001 02P
83-12-06	1420	462	L.10	--	--	.10	--	.06	L.02	.003 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-24	1515	462	L.015	L.002	.002	.001	.002	L.001	.06	L.004
83-03-01	1300	462	L.015	L.002	L.002	L.001	.003	L.001	.05	L.004
83-03-29	1615	462	L.015	L.002	.002	.002	--	L.001	L.05	L.004
83-04-27	0700	462	L.015 02W	L.002 20W	.008 20W	.006 20W	.038 20W	L.001 20W	L.05 20W	L.004 20W
83-05-24	1654	462	L.015	L.002	.004	.003	.005	L.001	.05	L.004
83-06-13	1649	462	L.015	L.002	.003	.002	.004	L.001	L.05	L.004
83-07-18	1520	462	L.015	L.002	.003	.001	.002	L.001	L.05	L.004
83-08-22	1540	462	--	L.001 02P	.004 02P	.004 05P	.004 05P	L.001 02P	L.10 01P	L.001 02P
83-09-19	1500	462	--	L.001 02P	.003 02P	.003 05P	.002 05P	L.001 02P	L.10 01P	.002 02P
83-10-17	1730	462	L.001 03P	L.001 02P	.002 02P	.002 05P	L.001 05P	L.001 02P	.15 01P	.001 02P
83-11-14	1545	462	L.001 03P	.001 02P	.002 02P	.001 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P
83-12-06	1420	462	L.001 03P	.001 02P	.003 02P	.002 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P

STATION - 00SA05MD0002 LAT. 51D 31M 59S LONG. 101D 53M 20S
ASSINIBOINE RIVER AT HWY 8 BRIDGE BELOW KAMSACK, SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-24	1515	462	.002	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-03-01	1300	462	.003	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-03-29	1615	462	.009	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-04-27	0700	462	.010 35W	L.001 11R	.003 75R	L.001 70R	L.001 30R	L.002 10R	L.001 20R	L.001 05R
83-05-24	1654	462	.009	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-06-13	1649	462	.038	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-07-18	1520	462	.008	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-08-22	1540	462	.006	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-09-19	1500	462	.012	L.001	.005	.006	L.001	L.002	L.001	L.001
83-10-17	1730	462	.004	L.001	.009	.001	L.001	L.002	L.001	L.001
83-11-14	1545	462	.004	L.001	.010	.001	L.001	L.002	L.001	L.001
83-12-05	1420	462	--	L.001	.009	.001	L.001	L.002	L.001	L.001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-24	1515	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-01	1300	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-29	1615	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-27	0700	462	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R
83-05-24	1654	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-13	1649	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-18	1520	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-22	1540	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-19	1500	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-17	1730	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-11-14	1545	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-12-06	1420	462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-24	1515	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-01	1300	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-29	1615	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-04-27	0700	462	L.001 25R	L.003 60R	L.002 65R	L.2 20W	.050 00W	L.009 50W	L.004 55W	L.002 10W
83-05-24	1654	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-06-13	1649	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-07-18	1520	462	L.001	L.003	L.002	L.2	.200	L.009	L.004	L.002
83-08-22	1540	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-09-19	1500	462	L.001	L.003	L.002	L.2	.014	L.009	L.004	L.002
83-10-17	1730	462	L.001	L.003	L.002	L.2	.005	L.009	L.004	L.002
83-11-14	1545	462	L.001	L.003	L.002	--	--	--	--	--
83-12-06	1420	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-24	1515	462	L.004	--	.002	L.002	L.005	L.002	--	--
83-03-01	1300	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-03-29	1615	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-04-27	0700	462	L.004 40W	--	L.002 59R	L.002 60R	L.005 62R	L.002 64R	--	--
83-05-24	1654	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-06-13	1649	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-07-18	1520	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-08-22	1540	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-09-19	1500	462	L.004	--	--	--	--	L.002	--	--
83-10-17	1730	462	L.004	--	--	--	--	L.002	--	--
83-11-14	1545	462	--	--	--	--	--	L.002	--	--
83-12-06	1420	462	L.004	--	--	--	--	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 00SA05NA0002 LAT. 49D 9M 0S LONG. 103D 30M 0S
LONG CREEK SOUTH OF TORQUAY, SASKATCHEWAN

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-04-12 1630	3	4.0	18.3	437.	392.	7.8	7.7	54.0	47.0
83-05-13 1605	3	5.0	22.1	829.	858.	8.2	8.1	8.2	4.5
83-06-01 1209	3	14.0	21.0	1252.	1310.	8.1	7.9	12.0	3.5
83-07-30 1920	3	24.0	24.5	1150.	1244.	8.2	8.2	2.2	1.8
83-08-23 1330	3	16.0	22.4	1272.	1320.	8.7	8.4	18.0	8.9

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-04-12 1630	3	120.	32.	--	.010	10.	5.	--	11.2
83-05-13 1605	3	40.	6.	--	.007	L2.	L2.	--	10.8
83-06-01 1209	3	50	5.	--	010	50.	14.	--	8.1
83-07-30 1920	3	40	2.	--	009	--	100.	--	8.8
83-08-23 1330	3	40.	20.	--	.040	--	154.	--	7.2

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-04-12 1630	3	0.	0	112.	92.0	28.0	14.1	128.0	33.0
83-05-13 1605	3	0.	.0	219.	180.0	56.2	29.4	261.4	85.0
83-06-01 1209	3	0.	.0	323.	265.0	76.8	44.5	375.0	192.0
83-07-30 1920	3	0.	.0	305.	250.0	54.1	43.4	313.8	158.0
83-08-23 1330	3	7.	5.7	321.	275.0	55.8	48.1	337.4	175.0

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-04-12 1630	3	10.0	6.8	.06	96.	10.0	253.	--	--
83-05-13 1605	3	8.8	12.0	.12	236.	7.2	543.	--	--
83-06-01 1209	3	10.0	17.0	.37	390.	6.2	896.	--	--
83-07-30 1920	3	11.0	19.0	.18	370	1.7	807.	--	--
83-08-23 1330	3	12.0	20.0	.25	396.	1.9	874.	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-04-12 1630	3	.270	.130	.140	--	.67	.73	.39	1.12
83-05-13 1605	3	.170	.067	.103	--	.71	.67	.15	.82
83-06-01 1209	3	.150	.100	.050	--	.69	.70	.09	.79
83-07-30 1920	3	.170	.170	.000	--	.99	.81	.09	.90
83-08-23 1330	3	.230	.054	.176	--	.84	.86	--	--

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID		07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-04-12 1630	3	.12	L.1	11.0	2.50	13.5	.15	.0014	L.0005
83-05-13 1605	3	L.01	L.1	11.0	.62	11.6	.14	.0022	L.0005
83-06-01 1209	3	L.01	L.1	12.0	.54	12.5	.18	.0021	L.0005
83-07-30 1920	3	L.01	L.1	14.0	.42	14.4	.22	.0065 08D	.0003 08D
83-08-23 1330	3	L.01	L.1	16.0	--	--	.29 05L	.0056 08D	.0002 08D

STATION - 05SA05NA0002 LAT. 49D 9M 05 LONG. 103D 30M 05
LONG CREEK SOUTH OF TORQUAY, SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-04-12	1630	3	--	--	--	02	--	19	L 02	--
83-05-13	1605	3	--	--	--	04	--	05	L 02	--
83-06-01	1209	3	--	--	--	20	--	04	L 02	--
83-07-30	1920	3	--	--	--	04	--	L 05	02	--
83-08-23	1330	3	--	--	--	02	--	04	L 02	--

FOOTNOTE L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 00SA05ND0001
SOURIS RIVER NEAR GLEN EWEN. SASKATCHEWAN LAT. 49D 10M 14S LONG. 102D 0M 38S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C	02061L TEMP. WATER DEG. C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-11	1510	140	.5	15.9	1722.	1700.	7.8	7.6	5.6	4.5
83-04-12	1240	140	4.0	12.5	578.	515.	8.1	7.9	46.0	29.0
83-05-13	0945	140	4.0	22.2	533.	521	8.1	8.0	110.0	79.0
83-06-01	1705	140	16.0	20.6	729	750.	8.2	8.1	34.0	27.0
83-07-30	1320	140	24.5	24 3	875.	945.	8.0	8.0	15.0	25.0
83-08-22	1650	140	18.0	21.2	1060.	1124.	8.1	8.1	15.0	16.0
83-09-20	1435	140	8.0	19.7	1080.	1136.	8.5	8.4	5.2	5.5
83-10-18	1500	140	5.0	21.7	1106.	1188.	8.2	8.1	4.0	4.2
83-11-15	1615	140	3.0	14.6	1120.	1187.	8.3	8.2	3.6	4.0
83-12-13	1130	140	.1	14.0	1240.	1340.	8.0	7.7	5.8	5.4

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-11	1510	140	30.	4.	--	.001	2.	2.	--	4.6
83-04-12	1240	140	70.	50.	--	.008	80.	10.	--	11.2
83-05-13	0945	140	70.	47.	--	.003	50.	50.	--	9.9
83-06-01	1705	140	60.	29.	--	.009	34.	10.	--	8.4
83-07-30	1320	140	40.	25.	--	.007	--	440.	--	6.8
83-08-22	1650	140	50.	17.	--	.010	--	228.	--	6.6
83-09-20	1435	140	30.	6.	--	.002	52.	36.	--	10.5
83-10-18	1500	140	20.	5.	--	.004	--	25.	--	10.7
83-11-15	1615	140	20.	6.	--	.008	50.	48.	--	12.8
83-12-13	1130	140	--	8.	--	.004	8.	L2.	--	8.7

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-11	1510	140	0.	.0	585.	480.0	77.1	49.7	397.1	260.0
83-04-12	1240	140	0.	.0	140.	115.0	33.0	14.5	142.1	55.0
83-05-13	0945	140	0.	.0	195.	160.0	35.1	22.6	180.7	38.0
83-06-01	1705	140	0.	.0	262.	215.0	45.6	27.2	225.8	70.0
83-07-30	1320	140	0.	.0	451.	370.0	52.0	28.1	245.5	104.0
83-08-22	1650	140	0.	.0	390.	320.0	67.7	34.6	311.5	137.0
83-09-20	1435	140	6.	5.2	451.	380.0	61.2	38.0	309.3	123.0
83-10-18	1500	140	0.	.0	427.	350.0 06L	75.2	38.5	346.3	120.0
83-11-15	1615	140	0.	.0	354.	290.0 06L	54.7	37.1	289.3	136.0
83-12-13	1130	140	0.	.0	329.	270.0 06L	28.4	38.0	227.4	173.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-11	1510	140	13.0	64.0	.30	415.	7.3	1174.	--	.003
83-04-12	1240	140	9.6	13.0	.21	140.	3.6	338.	--	.008
83-05-13	0945	140	9.5	9.1	.14	86.	17.0	313.	--	.005
83-06-01	1705	140	11.0	16.0	.24	150.	9.1	458.	--	.006
83-07-30	1320	140	11.0	39.0	.21	164.	7.8	528.	--	.008
83-08-22	1650	140	10.0	60.0	.26	190.	15.0	706.	--	.010
83-09-20	1435	140	9.6	70.0	.21	189.	14.0	733.	--	.006
83-10-18	1500	140	9.6	58.0	.24 08L	185.	13.0 02L	719.	--	.006
83-11-15	1615	140	9.2	68.0	--	194.	6.0 02L	679.	--	.003
83-12-13	1130	140	13.7	41.1	.27 08L	264.	4.7 02L	725.	--	.003

STATION - 00SA05ND0001
SOURIS RIVER NEAR GLEN EWEN. SASKATCHEWAN LAT. 49D 10M 14S LONG. 102D 0M 38S

DATE	TIME/	SUB-ID/	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
YMD/AMJ	HEURE	SOUS-ID								
83-01-11	1510	140	.062	.033	.029	--	.80	.79	.06	.85
83-04-12	1240	140	.200	.084	.116	--	.62	.64	.40	1.04
83-05-13	0945	140	.220	.100	.120	--	.96	1.00	.31	1.31
83-06-01	1705	140	.150	.080	.070	--	.82	.84	.12	.96
83-07-30	1320	140	.150	.098	.052	--	.61	.59	.18	.87
83-08-22	1650	140	.180	.100	.080	--	.54	.57	.19	.76
83-09-20	1435	140	.120	.096	.024	--	.66	.66	.42	1.08
83-10-18	1500	140	.110	.089	.021	--	.60	.62	.11	.73
83-11-15	1615	140	.083	.064	.019	--	.48	.49	.10	.59
83-12-13	1130	140	.096	.060	.036	--	.61	.61	.13	.74

DATE	TIME/	SUB-ID/	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	01105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
YMD/AMJ	HEURE	SOUS-ID								
83-01-11	1510	140	.05	.2	13.0	37	13.4	.72	.0010	L.0005
83-04-12	1240	140	.15	.1	8.1	2.90	11.0	.68	.0017	.0021
83-05-13	0945	140	.33	L.1	11.0	1.00	12.0	.22	.0032 04L	L.0005 02L
83-06-01	1705	140	.09	L.1	11.0	.85	11.9	.32	.0028	L.0005
83-07-30	1320	140	.05	L.1	10.0	1.10	11.1	.40	.0050 08D	.0002 08D
83-08-22	1650	140	.03	L.1	12.0	.96	13.0	.46 05L	.0064 08D	.0004 08D
83-09-20	1435	140	.01	L.1	9.9	2.60	12.5	.36 05L	.0052 08D	.0004 08D
83-10-18	1500	140	L.01	L.1	9.9	.53	10.4	.34	.0062 08D	.0002 08D
83-11-15	1615	140	L.01	L.1	9.4	.53	9.9	.34	.0031 08D	.0003 08D
83-12-13	1130	140	.01	L.1	16.0	.80	16.8	.45	.0031 08L	.0004 08L

DATE	TIME/	SUB-ID/	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
YMD/AMJ	HEURE	SOUS-ID								
83-01-11	1510	140	--	--	--	.33	--	.09	L.02	L.001
83-04-12	1240	140	--	--	--	.02	--	.09	L.02	.005
83-05-13	0945	140	--	--	--	.02	--	.07	L.02	.012
83-06-01	1705	140	--	--	--	.14	--	L.04	L.02	.003
83-07-30	1320	140	--	--	--	.17	--	.05	.03	.005
83-08-22	1650	140	--	--	--	.35	--	.04	L.02	.004 02P
83-09-20	1435	140	--	--	--	.15	--	L.04	.02	.004 02P
83-10-18	1500	140	--	--	--	.12	--	L.04	L.02	.002 02P
83-11-15	1615	140	--	--	--	.10	--	L.04	L.02	.005 02P
83-12-13	1130	140	--	--	--	--	--	--	L.02	.002 02P

DATE	TIME/	SUB-ID/	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
YMD/AMJ	HEURE	SOUS-ID								
83-01-11	1510	140	--	L.002	.003	.002	.001	L.001	.05	L.004
83-04-12	1240	140	--	L.002	.003	.006	--	L.001	L.05	L.004
83-06-13	0945	140	--	L.002	.010	010	.017	L.001	.10	L.004
83-06-01	1705	140	--	L.002	.005	.006	.006	L.001	.09	L.004
83-07-30	1320	140	--	L.002	.004	.002	.006	L.001	.11	L.004
83-08-22	1650	140	--	L.001 02P	.005 02P	.003 05P	.003 05P	L.001 02P	L.10 01P	L.001 02P
83-09-20	1435	140	--	.001 02P	.004 02P	.002 05P	.001 05P	L.001 02P	L.10 01P	L.001 02P
83-10-18	1500	140	--	L.001 02P	.004 02P	.004 05P	L.001 05P	L.001 02P	.21 01P	.001 02P
83-11-15	1615	140	--	L.001 02P	.002 02P	.001 05P	L.001 05P	L.001 02P	L.10 01P	.001 02P
83-12-13	1130	140	--	L.001 02P	.005 02P	.002 05P	.002 05P	L.001 02P	L.10 01P	.002 02P

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 05SA05ND0001
SOURIS RIVER NEAR GLEN EWEN, SASKATCHEWAN LAT. 49D 10M 14S LONG. 102D 0M 38S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-11	1510	140	.003	L.001	.004	L.001	L.001	L.002	L.001	L.001
83-04-12	1240	140	.006	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-05-13	0945	140	.008	L.001	.003	.002	L.001	L.002	L.001	L.001
83-06-01	1705	140	.007	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-07-30	1320	140	.004	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-08-22	1650	140	.007	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-09-20	1435	140	.003	L.001	.003	.001	L.001	L.002	L.001	L.001
83-10-18	1500	140	.004	L.001	.019	.001	L.001	L.002	L.001	L.001
83-11-15	1615	140	.004	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-12-13	1130	140	--	L.001	.010	.001	L.001	L.002	L.001	L.001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-11	1510	140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-12	1240	140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-13	0945	140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-01	1705	140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-30	1320	140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-22	1650	140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-20	1435	140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-18	1500	140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-11-15	1615	140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-12-13	1130	140	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-11	1510	140	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-04-12	1240	140	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-13	0945	140	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-06-01	1705	140	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-07-30	1320	140	L.001	L.003	L.002	L.2	.020	L.009	L.004	L.002
83-08-22	1650	140	L.001	L.003	L.002	--	--	--	--	--
83-09-20	1435	140	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-10-18	1500	140	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-11-15	1615	140	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-12-13	1130	140	L.001	L.003	L.002	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-11	1510	140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-12	1240	140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-13	0945	140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-01	1705	140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-30	1320	140	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-22	1650	140	--	L.2	L.002	L.002	L.005	L.002	--	--
83-09-20	1435	140	L.004	L.2	--	--	--	L.002	--	--
83-10-18	1500	140	L.004	L.2	--	--	--	L.002	--	--
83-11-15	1615	140	L.004	L.2	--	--	--	L.002	--	--
83-12-13	1130	140	--	--	--	--	--	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00SA06BB0004
CHURCHILL RIVER NEAR PATUANAK, SASKATCHEWAN LAT. 55D 55M 30S LONG. 107D 43M 40S

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-02-15 1130	1	.5	14.2	266	251	7.4	7.9	--	7
83-06-14 1330	1	7.0	20.7	233	296	6.6	7.6	--	1.3
83-08-30 1445	1	20.5	20.3	250	262	8.5	9.0	--	3.5
83-10-11 1245	1	8.0	14.2	253	271	7.6	8.0	--	2.3

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP MF NO/DL	08101M OXYGEN DISSOLVED DO O2 MG/L
83-02-15 1130	1	5	1	--	.006	--	--	--	11.6
83-06-14 1330	1	20	2	--	.003	--	--	--	5.9
83-08-30 1445	1	20	L1	--	.005	--	--	--	12.2
83-10-11 1245	1	10	4	--	.010	--	--	--	5.7

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	06701L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-02-15 1130	1	0.	.0	152	125.0	27.1	11.0	113.0	13.0
83-06-14 1330	1	0.	0	165	135.0	30.0	12.2	125.1	13.0
83-08-30 1445	1	9	7.1	141	130.0	29.0	11.9	121.4	12.0
83-10-11 1245	1	0.	.0	158	130.0	26.9	10.6	110.8	12.0

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06504P CYANIDE TOTAL CN MG/L
83-02-15 1130	1	2.2	6.6	.06	6.	.6	141	--	.002
83-06-14 1330	1	2.3	6.8	.09	5.	5.0	155	--	.003
83-08-30 1445	1	2.3	6.7	.13	6.	6.3	152	--	.004
83-10-11 1245	1	2.1	6.7	.07	6.	8.4	151	--	.003

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07503L NITROGEN TOTAL (CALCD.) N MG/L
83-02-15 1130	1	.017	.014 03L	.003	--	--	.48	.03	.51
83-06-14 1330	1	.037	.026 03L	.011	--	--	.54	.03	.57
83-08-30 1445	1	.032	.007 03L	.025	--	--	.43	.23	.66
83-10-11 1245	1	.073	.049 03L	.024	--	--	.56	.13	.69

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-02-15 1130	1	.11	--	8.2	.18	8.4	.06 05L	L.0005 04L	L.0005 02L
83-06-14 1330	1	.05	--	8.4	.16	8.6	.11 05L	L.0005 04L	L.0005 02L
83-08-30 1445	1	L.01	--	7.9	1.10	9.0	.14 05L	.0008 08L	L.0001 08L
83-10-11 1245	1	.04	--	8.0	.72	8.7	.13 05L	.0015 08L	.0002 08L

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-02-15 1130	1	--	L.004	.18	--	L.04	--	--	L.001
83-06-14 1330	1	--	L.004	.32	--	L.04	--	--	L.001
83-08-30 1445	1	--	L.005	--	--	--	--	--	.001 02P
83-10-11 1245	1	--	L.005	.13	--	L.04	--	--	L.001 02P

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 00SA06BB0004 LAT. 55D 55M 30S LONG. 107D 43M 40S
CHURCHILL RIVER NEAR PATUANAK. SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-02-15	1130	1	L.015	L.002	L.002	.003	.004	L.001	.05	L.004
83-06-14	1330	1	L.015	L.002	L.002	L.001	.001	L.001	L.05	L.004
83-08-30	1445	1	--	L.001 02P	L.001 02P	L.001 05P	L.001 05P	L.001 02P	.10 01P	L.001 02P
83-10-11	1245	1	.001 03P	L.001 02P	.005 02P	.005 05P	.014 05P	L.001 02P	.13 01P	.002 02P

DATE YMD/AMJ	TIME/ HEURE	SUR-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-02-15	1130	1	.002	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-06-14	1330	1	.008	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-10-11	1245	1	.003	L.001	.006	L.001	L.001	L.002	L.001	L.001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-02-15	1130	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-14	1330	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-11	1245	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-02-15	1130	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-06-14	1330	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-10-11	1245	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1280 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-02-15	1130	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-14	1330	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-10-11	1245	1	L.004	L.2	--	--	--	L.002	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97354L COMPOSITE SAMPLE DESCRIPTIVE CODE	06152L CARBON DISSOLVED INORGANIC C MG/L
83-02-15	1130	1	--	30.0
83-06-14	1330	1	--	33.0
83-10-11	1245	1	--	31.0

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00SA06CD0001
CHURCHILL RIVER AT OTTER RAPIDS. SASKATCHEWAN LAT. 55D 38M 28S LONG. 104D 44M 3S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-02-15	1545	1	.5	13.7	120.	137.	7.0	7.5	--	1.2
83-06-15	1330	1	14.0	20.5	131.	139.	7.6	8.0	--	1.1
83-08-31	1540	1	21.0	19.5	128.	132.	8.1	8.3	--	2.4
83-10-12	1115	1	8.0	16.9	120.	132.	8.1	8.5	--	2.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101H OXYGEN DISSOLVED DO O2 MG/L
83-02-15	1545	1	10.	1	--	.002	--	--	--	13.2
83-06-15	1330	1	20.	2	--	.001	--	--	--	10.0
83-08-31	1540	1	20.	4	--	.006	--	--	--	9.3
83-10-12	1115	1	20.	6	--	.010	--	--	--	10.1

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-02-15	1545	1	0.	.0	76.	62.0	14.6	6.0	61.2	5.6
83-06-15	1330	1	0.	.0	73.	60.0	13.9	5.6	57.8	5.7
83-08-31	1540	1	0.	.0	72.	59.0	13.8	5.7	57.9	5.3
83-10-12	1115	1	1.	1.1	70.	60.0	18.2	5.6	58.5	4.6

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-02-15	1545	1	1.4	2.5	L.05	3.	2.6	73.	--	.002
83-06-15	1330	1	1.4	2.6	.07	4.	3.8	73.	--	.003
83-08-31	1540	1	1.4	2.6	.10	3.	5.1	73.	--	.003
83-10-12	1115	1	1.1	2.7	.05	4.	2.9	75.	--	.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-02-15	1545	1	.017	.012 03L	.005	--	--	.38	.04	.43
83-06-15	1330	1	.018	.009 03L	.009	--	--	.26	.09	.35
83-08-31	1540	1	.025	.004 03L	.021	--	--	.33	.10	.43
83-10-12	1115	1	.030	.008 03L	.022	--	--	.35	.13	.48

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-02-15	1545	1	.08	--	7.5	.32	7.8	.06 05L	L.0005 04L	L.0005 02L
83-06-15	1330	1	L.01	--	7.1	.51	7.6	.06 05L	L.0005 04L	L.0005 02L
83-08-31	1540	1	L.01	--	6.7	.57	7.3	.09 05L	.0009 08L	L.0001 08L
83-10-12	1115	1	L.01	--	6.8	.90	7.7	.06 05L	.0016 08L	L.0001 08L

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-02-15	1545	1	--	L.004	.10	--	L.04	--	--	L.001
83-06-15	1330	1	--	L.004	.03	--	.04	--	--	L.001
83-08-31	1540	1	--	L.005	--	--	--	--	--	L.001 02P
83-10-12	1115	1	--	L.005	.06	--	.07	--	--	L.001 02P

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 00SA06CD0001
CHURCHILL RIVER AT OTTER RAPIDS, SASKATCHEWAN LAT. 55D 38M 28S LONG. 104D 44M 35S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-02-15	1545	1	L.015	L.002	L.002	.003	.007	L.001	L.05	L.004
83-06-15	1330	1	L.015	L.002	L.002	L.001	.002	L.001	L.05	L.004
83-08-31	1540	1	--	L.001 02P	L.001 02P	L.001 05P	L.001 05P	L.001 02P	.10 01P	L.001 02P
83-10-12	1115	1	.001 03P	L.001 02P	L.001 02P	.002 05P	L.001 05P	.001 02P	.12 01P	.002 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97354L COMPOSITE SAMPLE DESCRIPTIVE CODE	06152L CARBON DISSOLVED INORGANIC C MG/L
83-02-15	1545	1	--	15.0
83-06-15	1330	1	--	14.0

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00SA06DA0001 LAT. 57D 35M 20S LONG. 104D 12M 10S
GEIKIE RIVER BELOW JUNCTION OF WHEELER RIVER, SASKATCHEWAN

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG C	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-06-15 1130	1	12.0	20.6	20.	22.	7.6	7.1	--	8
83-08-31 1335	1	18.5	20.2	20.	26.	7.1	7.3	--	1.5
83-10-12 0945	1	4.5	15.0	19.	25.	7.3	7.2	--	1.2

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	05717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-06-15 1130	1	30	1	--	.002	--	--	--	10.1
83-08-31 1335	1	30	1.	--	.001	--	--	--	8.9
83-10-12 0945	1	30	1.	--	.003	--	--	--	10.1

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-06-15 1130	1	0	0	9.	7.6	1.8	.8	7.8	1.2
83-08-31 1335	1	0.	.0	11.	9.0	2.8	.8	10.3	1.4
83-10-12 0945	1	0.	.0	10.	7.8	2.0	.8	8.3	.9

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-06-15 1130	1	.6	.5	07	2	5.4	17.	--	.002
83-08-31 1335	1	.6	4	.08	2.	6.4	20.	--	.003
83-10-12 0945	1	.4	.4	L.05	2	6.9	18	--	.002

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-06-15 1130	1	.014	.007 03L	.007	--	--	.16	.05	.21
83-08-31 1335	1	012	005 03L	.007	--	--	.21	.04	.25
83-10-12 0945	1	.011	.006 03L	.005	--	--	.22	06	.28

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-06-15 1130	1	L.01	--	4.8	.44	5.2	.07 05L	L.0005 04L	L.0005 02L
83-08-31 1335	1	L.01	--	4.4	.28	4.7	.10 05L	.0009 08L	L.0001 08L
83-10-12 0945	1	L.01	--	4.9	.45	5.4	.09 05L	.0011 08L	.0001 08L

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-06-15 1130	1	--	L.004	.01	--	.11	--	--	L.001
83-08-31 1335	1	--	L.005	--	--	--	--	--	.001 02P
83-10-12 0945	1	--	L.005	.02	--	.21	--	--	L.001 02P

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 005A05DA0001 LAT. 57D 35M 20S LONG. 104D 12M 10S
GEIKIE RIVER BELOW JUNCTION OF WHEELER RIVER, SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-06-15	1130	1	L.015	L.002	.002	L.001	.002	L.001	L.05	L.004
83-08-31	1335	1	--	L.001 02P	L.001 02P	L.001 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P
83-10-12	0945	1	.001 03P	L.001 02P	L.001 02P	.002 05P	L.001 05P	L.001 02P	L.10 01P	.001 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97354L COMPOSITE SAMPLE DESCRIPTIVE CODE	06152L CARBON DISSOLVED INORGANIC C MG/L
83-06-15	1130	1	--	2.0
83-10-12	0945	1	--	2.3

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 00SA06EA0003
CHURCHILL RIVER BELOW WASAWAKASIK LAKE, SASKATCHEWAN LAT. 55D 38M 29S LONG. 102D 11M 44S

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-26 1030 462	.0	18.1	58.	57.	7.2	7.6	.9	1.2
83-03-02 1330 462	.0	20.5	71.	58.	7.5	7.3	1.7	1.0
83-03-31 0955 462	.5	21.6	85.	57.	7.5	7.6	1.4	.7
83-05-26 1002 462	4.0	22.5	96.	69.	7.5	7.6	3.9	1.8
83-06-15 1045 462	11.0	16.0	100.	76.	7.2	7.5	7.3	4.5
83-07-20 0900 462	19.0	6.1 61R	138.	101. 41R	7.4	7.7 01R	7.2	2.4 73R
83-08-24 0850 462	18.0	22.9	152.	117.	7.7	7.8	5.1	2.1
83-09-21 1207 462	10.0	12.4	125.	90.	7.3	7.6	13.0	4.5
83-10-19 0825 462	3.0	15.0	107.	79.	7.2	7.5	7.3	4.1

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101M OXYGEN DISSOLVED DO O2 MG/L
83-01-26 1030 462	10.	1.	L1.	.001	L2.	L2.	--	13.6
83-03-02 1330 462	5.	2.	L1.	.001	L2.	L2.	--	12.6
83-03-31 0955 462	10.	3.	2.	.001	--	--	--	11.0
83-05-26 1002 462	10.	2.	1.	.007	L2.	L2.	--	11.5
83-06-15 1045 462	30.	5.	4.	.002	2.	2.	--	9.9
83-07-20 0900 462	20. 21R	3. 01R	1. 01R	.002 17T	6. 02U	L2. 12U	--	8.1
83-08-24 0850 462	10.	5.	3.	.005	18.	2.	--	8.2
83-09-21 1207 462	10.	5.	4.	.006	4.	L2.	--	10.2
83-10-19 0825 462	20.	5.	4.	.005	24.	2.	--	11.3

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-26 1030 462	0.	.0	30.	25.0	6.4	2.6	26.7	2.8
83-03-02 1330 462	0.	.0	30.	25.0	5.9	2.4	24.6	2.1
83-03-31 0955 462	0.	.0	30.	25.0	6.0	2.4	24.9	2.2
83-05-26 1002 462	0	.0	34.	28.0	6.6	2.7	27.6	2.5
83-06-15 1045 462	0.	.0	39.	32.0	7.7	3.2	32.4	2.6
83-07-20 0900 462	0.	.0 51R	52.	43.0 01R	10.8 03R	4.4 02R	45.1	3.4 03R
83-08-24 0850 462	0.	.0	62.	51.0	12.7	4.9	51.9	4.5
83-09-21 1207 462	0.	.0	50.	41.0	9.3	3.4	37.2	3.3
83-10-19 0825 462	0.	.0	41.	34.0 06L	8.0	3.1	32.7	3.4

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-26 1030 462	.8	.8	.07	3.	1.3	33.	--	.002
83-03-02 1330 462	.8	.9	.09	2	1.4	30.	--	.001
83-03-31 0955 462	.8	.9	L.05	2.	1.2	30.	--	.004
83-05-26 1002 462	.9	1.1	.07	2.	1.2	34.	--	.002
83-06-15 1045 462	.9	1.2	.08	3.	1.6	39.	--	L.001
83-07-20 0900 462	1.2 03R	1.5 06R	.08 05R	4. 06R	--	--	--	.002 04W
83-08-24 0850 462	1.4	1.9	.12	4.	3.2	63	--	.004
83-09-21 1207 462	1.3	1.5	.08	4.	2.4	50.	--	.003
83-10-19 0825 462	.9	1.2	.06 08L	4	.6 02L	42.	--	.003

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-26 1030 462	.008	.006	L.006	L.003	.21	.21	L.01	Q.22
83-03-02 1330 462	.014	.003	.011	L.003	.20	.22	L.01	Q.23
83-03-31 0955 462	.047	.012	.035	L.003	.24	.21	.02	.23
83-05-26 1002 462	.014	.005	.009	L.003	.21	.20	.02	.22
83-06-15 1045 462	.017	.003	.014	L.003	.26	.25	.03	.28
83-07-20 0900 462	.019 06R	.006 03V	.013	L.003 56V	.27 51V	.27 51R	.04 02R	.31
83-08-24 0850 462	.023	.007	.016	L.003	.28	.28	.10	.38
83-09-21 1207 462	.025	.010	.015	L.003	.34	.34	.10	.44
83-10-19 0825 462	.020	.009	.011	L.003	.25	.24	.12	.36

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 00SA08EA0003 LAT. 55D 38M 29S LONG. 102D 11M 44S
CHURCHILL RIVER BELOW WASAHAKASIK LAKE, SASKATCHEWAN

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-26 1030 462	.03	L.1	4.5	.12	4.6	.02	L.0005	L.0005
83-03-02 1330 462	.05	L.1	4.0	.18	4.2	.02 05L	L.0005	L.0005
83-03-31 0955 462	.08	L.1	4.6	.11	4.7	L.02	L.0005	L.0005
83-05-26 1002 462	L.01	L.1	5.7	.21	5.9	.03	L.0005	L.0005
83-06-15 1045 462	L.01	L.1	6.7	.20	6.9	.04	L.0005	L.0005
83-07-20 0900 462	L.01 10R	L.1 06W	7.6 04R	.23 02R	7.8	.04 05V	L.0005 08V	L.0005 08V
83-08-24 0850 462	L.01	L.1	8.3	.59	8.9	.07 05L	.0007 08D	.0001 08D
83-09-21 1207 462	.01	L.1	7.3	.59	7.9	.05	.0008 08D	L.0001 08D
83-10-19 0825 462	L.01	L.1	6.8	.65	7.5	.06	.0012 08D	L.0001 08D

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-26 1030 462	.10	--	--	L.01	--	L.04	L.02	L.001
83-03-02 1330 462	L.02	--	--	L.01	--	L.04	L.02	L.001
83-03-31 0955 462	.04	--	--	L.01	--	L.04	L.02	L.001
83-05-26 1002 462	L.02	--	--	.09	--	.05	L.02	L.001
83-06-15 1045 462	.18	--	--	.08	--	.15	L.02	L.001
83-07-20 0900 462	.12 02W	--	--	.06 04T	--	.04 04T	L.02 11W	L.001 20W
83-08-24 0850 462	L.10	--	--	.14	--	.03	L.02	.001 02P
83-09-21 1207 462	.28	--	--	.13	--	.07	L.02	.001 02P
83-10-19 0825 462	.26	--	--	.08	--	.10	L.02	.001 02P

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-26 1030 462	L.015	L.002	L.002	L.001	L.001	L.001	L.05	L.004
83-03-02 1330 462	L.015	L.002	L.002	.001	.003	L.001	L.05	L.004
83-03-31 0955 462	L.015	L.002	.002	.001	--	L.001	L.05	L.004
83-05-26 1002 462	L.015	L.002	L.002	.002	.003	L.001	L.05	L.004
83-06-15 1045 462	L.015	L.002	L.002	.001	.003	L.001	L.05	L.004
83-07-20 0900 462	L.015 02W	L.002 20W	L.002 20W	.001 20W	.001 20W	L.001 20W	L.05 20W	L.004 20W
83-08-24 0850 462	--	L.001 02P	.002 02P	.001 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P
83-09-21 1207 462	--	L.001 02P	.001 02P	.002 05P	.002 05P	L.001 02P	L.10 01P	.003 02P
83-10-19 0825 462	.001 03P	L.001 02P	L.001 02P	.001 05P	L.001 05P	L.001 02P	.12 01P	.003 02P

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-26 1030 462	.002	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-03-02 1330 462	.003	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-03-31 0955 462	.001	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-05-26 1002 462	.003	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-06-15 1045 462	.009	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-07-20 0900 462	.008 35W	L.001 11R	.002 75R	L.001 70R	L.001 30R	L.002 10R	L.001 20R	L.001 05R
83-08-24 0850 462	.004	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-09-21 1207 462	.003	L.001	.001	L.001	L.001	L.002	L.001	L.001
83-10-19 0825 462	.003	L.001	.008	.001	L.001	L.002	L.001	L.001

DATE TIME/ SUB-ID/ YMD/AMJ HEURE SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-01-26 1030 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-02 1330 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-03-31 0955 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-26 1002 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-15 1045 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-20 0900 462	L.004 00R	L.01 30R	L.002 40R	L.001 50R	L.003 55R	L.001 40R	L.002 45R	L.002 50R
83-08-24 0850 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-21 1207 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-19 0825 462	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

STATION - 00SA06EA0003
CHURCHILL RIVER BELOW WASAWAKASIK LAKE, SASKATCHEWAN LAT. 55D 38M 29S LONG. 102D 11M 44S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-26	1030	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-02	1330	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-03-31	0955	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-26	1002	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-06-15	1045	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-07-20	0900	462	L.001 25R	L.003 60R	L.002 65R	L.2 20W	L.004 00W	L.009 50W	L.004 55W	L.002 10W
83-08-24	0850	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-09-21	1207	462	L.001	L.003	L.002	L.2	.016	L.009	L.004	L.002
83-10-19	0825	462	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-26	1030	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-03-02	1330	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-03-31	0955	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-05-26	1002	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-06-15	1045	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-07-20	0900	462	L.004 40W	--	L.002 59R	L.002 60R	L.005 62R	L.002 64R	--	--
83-08-24	0850	462	L.004	--	L.002	L.002	L.005	L.002	--	--
83-09-21	1207	462	.010	--	--	--	--	L.002	--	--
83-10-19	0825	462	L.004	--	--	--	--	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT. G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 00SA07LC0001 LAT. 59D 8M 48S LONG. 105D 32M 20S
FOND DU LAC RIVER AT OUTLET OF BLACK LAKE, SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-06-15	1000	1	7.0	20.7	34.	39.	7.3	7.2	--	.5
83-08-31	1045	1	16.5	19.7	28.	31.	7.4	7.5	--	.4
83-10-12	0815	1	7.0	16.2	27.	35.	7.3	7.2	--	.8

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-06-15	1000	1	10.	1.	--	.003	--	--	--	11.8
83-08-31	1045	1	L5.	L1.	--	.002	--	--	--	10.0
83-10-12	0815	1	5.	1.	--	--	--	--	--	12.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-06-15	1000	1	0.	.0	12.	9.6	3.2	1.3	13.3	2.0
83-08-31	1045	1	0.	.0	12.	10.0	3.0	1.0	11.6	1.2
83-10-12	0815	1	0.	.0	12.	10.0	2.5	1.0	10.4	.9

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-06-15	1000	1	.8	4.1	L.05	1.	5.2	24.	--	.002
83-08-31	1045	1	.6	1.3	.07	2.	3.3	18.	--	.002
83-10-12	0815	1	.5	1.2	L.05	2.	3.3	18.	--	.001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-06-15	1000	1	.013	.004 03L	.009	--	--	10	.03	.13
83-08-31	1045	1	.005	.003 03L	.002	--	--	.15	.02	.17
83-10-12	0815	1	.013	.006 03L	.007	--	--	.17	.05	.22

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-06-15	1000	1	L.01	--	2.7	.21	2.9	.06 05L	L.0005 04L	L.0005 02L
83-08-31	1045	1	L.01	--	3.5	.18	3.7	.04 05L	.0011 08L	L.0001 08L
83-10-12	0815	1	L.01	--	3.7	.29	4.0	.06 05L	.0016 08L	.0001 08L

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-06-15	1000	1	--	L.004	.05	--	.05	--	--	L.001
83-08-31	1045	1	--	L.005	--	--	--	--	--	L.001 02P
83-10-12	0815	1	--	L.005	L.01	--	L.04	--	--	L.001 02P

STATION - 00SA07LC0001 LAT. 59D 8M 48S LONG. 105D 32M 20S
FOND DU LAC RIVER AT OUTLET OF BLACK LAKE, SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-06-15	1000	1	L.015	L.002	L.002	L.001	L.001	L.001	L.05	L.004
83-08-31	1045	1	--	L.001 02P	.001 02P	L.001 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P
83-10-12	0815	1	.002 03P	L.001 02P	L.001 02P	.003 05P	.003 05P	L.001 02P	.11 01P	.002 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97354L COMPOSITE SAMPLE DESCRIPTIVE CODE	06152L CARBON DISSOLVED INORGANIC C MG/L
83-06-15	1000	1	--	2.0

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 00SA07MA0001 LAT. 58D 19M 18S LONG. 109D 47M 8S
DOUGLAS RIVER APPROX. 16.1KM. BELOW CLUFF CREEK SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-06-14	1600	1	14.0	20.8	136.	147.	7.6	7.8	--	.6
83-08-30	1200	1	19.0	20.1	187.	199.	7.7	7.9	--	.9
83-10-11	1520	1	5.5	15.9	175.	175.	7.6	7.0	--	1.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-06-14	1600	1	30.	1.	--	.001	--	--	--	10.5
83-08-30	1200	1	30.	L1.	--	.002	--	--	--	10.3
83-10-11	1520	1	20.	1.	--	.001	--	--	--	10.2

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-06-14	1600	1	0.	.0	45.	37.0	13.0	7.2	62.1	3.2
83-08-30	1200	1	0.	.0	56.	46.0	18.0	10.0	86.1	3.9
83-10-11	1520	1	0.	.0	54.	44.0	15.0	8.2	71.2	3.3

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-06-14	1600	1	.9	18.0	L.05	2.	8.0	75.	--	.002
83-08-30	1200	1	1.1	30.0	.06	2.	9.2	102.	--	.003
83-10-11	1520	1	.9	27.0	L.05	3.	10.0	94.	--	.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-06-14	1600	1	.008	.008 03L	.000	--	--	.13	.02	.15
83-08-30	1200	1	.007	L.003 03L	Q.004	--	--	.15	.02	.17
83-10-11	1520	1	.008	.005 03L	.003	--	--	.18	.04	.22

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07505P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-06-14	1600	1	L.01	--	5.0	.17	5.2	.10 05L	L.0005 04L	L.0005 02L
83-08-30	1200	1	L.01	--	3.6	.14	3.7	.11 05L	.0015 08L	L.0001 08L
83-10-11	1520	1	.02	--	3.9	.27	4.2	.13 05L	.0010 08L	L.0001 08L

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-06-14	1600	1	--	L.004	L.01	--	.17	--	--	L.001
83-08-30	1200	1	--	L.005	--	--	--	--	--	.001 02P
83-10-11	1520	1	--	L.005	.01	--	.26	--	--	L.001 02P

STATION - 00SA07MA0001 LAT. 58D 19M 18S LONG. 109D 47M 8S
DOUGLAS RIVER APPROX. 16.1KM. BELOW CLUFF CREEK SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-06-14	1600	1	L.015	L.002	L.002	L.001	L.001	L.001	L.05	L.004
83-08-30	1200	1	--	L.001 02P	L.001 02P	L.001 05P	L.001 05P	L.001 02P	L.10 01P	L.001 02P
83-10-11	1520	1	.005 03P	L.001 02P	L.001 02P	.001 05P	L.001 05P	L.001 02P	.11 01P	.002 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97354L COMPOSITE SAMPLE DESCRIPTIVE CODE	06152L CARBON DISSOLVED INORGANIC C MG/L
83-06-14	1600	1	--	9.0

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 05SA11AB0005 LAT. 49D 0M 10S LONG. 109D 25M 18S
BATTLE CREEK NEAR U.S. BOUNDARY SOUTHEAST OF CONSUL, SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-03-09	1030	1	.0	17.8	580.	509.	8.4	8.0	--	4.0
83-04-06	1025	1	2.5	19.0	400.	360.	8.5	8.2	--	5.0
83-05-03	1030	1	11.0	13.5	660.	591.	8.7	8.3	--	2.5
83-06-06	1020	1	16.5	17.8	665.	635.	8.8	8.6	--	3.3
83-07-05	1045	1	19.5	6.3	540.	516.	9.7	9.5	--	3.5
83-08-31	1050	1	19.0	20.8	660.	624.	10.0	9.7	--	2.3
83-10-18	1030	1	4.5	17.4	1070.	1007.	9.0	8.5	--	3.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-03-09	1030	1	20.	2.	--	--	L2.	L2.	--	12.0
83-04-06	1025	1	20	4.	--	--	40.	10.	--	12.0
83-05-03	1030	1	20.	3.	--	--	22.	L2.	--	9.1
83-06-06	1020	1	30.	4.	--	--	--	--	--	8.6
83-07-05	1045	1	30.	6.	--	--	200.	18.	--	8.0
83-08-31	1050	1	50.	2.	--	--	1000.	224.	--	7.2
83-10-18	1030	1	20.	2.	--	--	210.	40.	--	10.5

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-03-09	1030	1	0.	.0	268.	220.0	54.7	23.5	233.3	30.0
83-04-06	1025	1	0.	.0	183.	150.0	38.4	15.8	160.9	22.0
83-05-03	1030	1	0.	.0	280.	230.0	47.2	28.0	233.1	48.0
83-06-06	1020	1	9.	7.1	251.	220.0	43.4	32.7	243.0	45.0
83-07-05	1045	1	30.	25.0	140.	165.0	15.2	28.3	154.5	50.0
83-08-31	1050	1	55.	46.0	126.	195.0	15.4	30.3	163.2	80.0
83-10-18	1030	1	9.	7.6	298.	260.0 06L	42.8	50.0	312.7	104.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-03-09	1030	1	4.1	2.8	.08	62.	9.8	319.	--	--
83-04-06	1025	1	3.0	2.3	.12	48.	7.0	227.	--	--
83-05-03	1030	1	5.5	4.3	.20	104.	4.6	380.	--	--
83-06-06	1020	1	6.3	3.6	.46	116.	11.0	391.	--	--
83-07-05	1045	1	4.5	3.1	.25	95.	1.2	296.	--	--
83-08-31	1050	1	6.7	7.0	.25	120.	3.7	380.	--	--
83-10-18	1030	1	9.0	9.4	.26 08L	264.	.4 02L	636.	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-03-09	1030	1	.016	.004 03L	.012	--	--	.19	.04	.23
83-04-06	1025	1	.020	.005 03L	.015	--	--	.21	.06	.27
83-05-03	1030	1	.037	.021 03L	.016	--	--	.38	.12	.50
83-06-06	1020	1	.028	.018 03L	.010	--	--	.63	.06	.69
83-07-05	1045	1	.048	.019 03L	.029	--	--	.62	.12	.74
83-08-31	1050	1	.035	.024 03L	.011	--	--	.89	.04	.93
83-10-18	1030	1	.022	.010 03L	.012	--	--	.62	.11	.73

STATION - 05SA11AB0005
BATTLE CREEK NEAR U.S. BOUNDARY SOUTHEAST OF CONSUL, SASKATCHEWAN LAT. 49D 0M 10S LONG. 109D 25M 18S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-03-09	1030	1	L .01	--	4.1	.24	4.3	.05 05L	L .0005 04L	L .0005 02L
83-04-06	1025	1	L .01	--	4.1	.37	4.5	.08	.0005 04L	L .0005 02L
83-05-03	1030	1	L .01	--	6.5	.69	7.2	.09 05L	.0012 04L	L .0005 02L
83-06-06	1020	1	L .01	--	10.0	.44	10.4	.13 05L	.0046 04L	L .0005 02L
83-07-05	1045	1	L .01	--	8.4	.88	9.3	.08 05L	.0053 04L	L .0005 02L
83-08-31	1050	1	L .01	--	14.0	.29	14.3	.14 05L	.0097 08L	.0002 08L
83-10-18	1030	1	L .01	--	8.7	.67	9.4	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 00SA11AB0007 LAT. 49D 0M 24S LONG. 109D 43M 30S
LODGE CREEK NEAR WILLOW CREEK AT HWY 21, SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-04-06	1415	1	7.0	19.6	790.	733.	8.7	8.4	--	3.3
83-05-03	1420	1	12.5	14.3	855.	763.	8.8	8.5	--	2.3
83-06-06	1410	1	17.5	17.9	700.	696.	8.7	8.5	--	1.4

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-04-06	1415	1	30.	3.	--	--	30.	6.	--	11.9
83-05-03	1420	1	20.	4.	--	--	4.	L2.	--	9.9
83-06-06	1410	1	30.	1.	--	--	--	--	--	9.7

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-04-06	1415	1	2.	2.0	202.	170.0	61.9	29.7	276.8	85.0
83-05-03	1420	1	5.	4.4	203.	175.0	54.0	33.0	270.7	75.0
83-06-06	1410	1	4.	3.3	187.	160.0	55.3	27.1	249.7	50.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-04-06	1415	1	8.9	5.4	.15	228.	9.2	510.	--	--
83-05-03	1420	1	9.2	5.5	.21	248.	2.2	532.	--	--
83-06-06	1410	1	7.8	4.0	.32	192.	8.8	441.	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-04-06	1415	1	.046	.016 03L	.030	--	--	.53	.17	.70
83-05-03	1420	1	.039	.021 03L	.018	--	--	.58	.14	.72
83-06-06	1410	1	.058	.050 03L	.008	--	--	.53	.08	.61

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-04-06	1415	1	L.01	--	10.0	1.20	11.2	.13	.0015 04L	L.0005 02L
83-05-03	1420	1	L.01	--	10.0	1.00	11.0	.10 05L	.0012 04L	L.0005 02L
83-06-06	1410	1	L.01	--	8.9	.41	9.3	.12 05L	.0021 04L	L.0005 02L

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 005A11AC0002
FRENCHMAN RIVER AT THE 49TH PARALLEL SASKATCHEWAN LAT. 49D 0M 0S LONG. 107D 18M 10S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-03-07	1100	1	.0	15.0	580.	763.	8.2	7.8	--	54.0
83-04-05	1040	1	3.0	18.0	400.	380.	8.0	7.2	--	100.0
83-05-02	1100	1	11.5	15.4	995.	915.	8.5	8.2	--	15.0
83-05-31	1045	1	14.5	22.5	850.	820.	8.5	8.3	--	6.8
83-07-04	1045	1	18.5	21.7	1070.	1050.	8.7	8.4	--	17.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED OD O2 MG/L
83-03-07	1100	1	200.	73.	--	--	28.	8	--	12.2
83-04-05	1040	1	240.	148.	--	--	45.	20	--	11.3
83-05-02	1100	1	30.	27.	--	--	2.	2	--	9.1
83-05-31	1045	1	20.	13.	--	--	--	--	--	9.2
83-07-04	1045	1	30.	14.	--	--	14.	12.	--	7.1

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-03-07	1100	1	0.	.0	183.	150.0	38.5	28.5	213.5	80.0
83-04-05	1040	1	0.	.0	108.	89.0	18.5	11.5	93.5	40.0
83-05-02	1100	1	0.	.0	280.	230.0	54.0	39.5	297.5	100.0
83-05-31	1045	1	0.	.0	262.	215.0	47.5	32.4	252.0	85.0
83-07-04	1045	1	5.	3.8	295.	250.0	53.2	41.5	303.7	120.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-03-07	1100	1	11.0	7.3	.19	240.	8.2	504.	--	.003
83-04-05	1040	1	8.8	3.1	.10	86.	10.0	231.	--	.004
83-05-02	1100	1	8.5	6.1	.29	272.	4.2	622.	--	.003
83-05-31	1045	1	8.0	4.8	.28	204.	3.4	514.	--	.002
83-07-04	1045	1	11.0	7.0	.28	280.	1.4	664.	--	.001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-03-07	1100	1	.310	.210 03L	.100	--	--	.83	.41	1.24
83-04-05	1040	1	.320	.180 03L	.140	--	--	.83	.60	1.43
83-05-02	1100	1	.072	.033 03L	.039	--	--	.42	.19	.61
83-05-31	1045	1	.064	.043 03L	.021	--	--	.41	.07	.48
83-07-04	1045	1	.072	.030 03L	.042	--	--	.49	.13	.62

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-03-07	1100	1	.05	--	18.0	2.80	20.8	.25 05L	.0022 04L	L.0005 02L
83-04-05	1040	1	.03	--	17.0	4.30	21.3	.23	.0026 04L	L.0005 02L
83-05-02	1100	1	L.01	--	7.6	1.10	8.7	.12 05L	.0016 04L	L.0005 02L
83-05-31	1045	1	L.01	--	7.4	.50	7.9	.11 05L	.0023 04L	L.0005 02L
83-07-04	1045	1	L.01	--	7.2	.67	7.9	.13 05L	.0020 04L	L.0005 02L

STATION - 05SA11AC0002 LAT. 49D 00M 05 LONG. 107D 18M 10S
FRENCHMAN RIVER AT THE 49TH PARALLEL SASKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-03-07	1100	1	--	--	.05	--	.80	--	--	.009
83-04-05	1040	1	--	--	.10	--	2.00	--	--	.013
83-05-02	1100	1	--	--	.16	--	.39	--	--	.003
83-05-31	1045	1	--	--	.10	--	.23	--	--	.003
83-07-04	1045	1	--	--	.18	--	.20	--	--	.003

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-03-07	1100	1	--	.002	.003	L.001	--	L.001	L.05	L.004
83-04-05	1040	1	--	L.002	.008	.008	.034	L.001	L.05	L.004
83-05-02	1100	1	--	L.002	.002	.002	.004	L.001	L.05	L.004
83-05-31	1045	1	--	L.002	.005	.008	.002	L.001	L.05	L.004
83-07-04	1045	1	--	L.002	.003	.003	.004	L.001	.06	L.004

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-03-07	1100	1	.015	L.001	.007	.002	L.001	L.002	L.001	L.001
83-04-05	1040	1	.016	L.001	.005	.001	L.001	L.002	L.001	L.001
83-05-02	1100	1	.005	L.001	.004	L.001	L.001	L.002	L.001	L.001
83-05-31	1045	1	.003	L.001	.003	L.001	L.001	L.002	L.001	L.001
83-07-04	1045	1	.005	L.001	.001	L.001	L.001	L.002	L.001	L.001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L MEOD (DIELDRIN) UG/L
83-03-07	1100	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-05	1040	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-02	1100	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-31	1045	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-04	1045	1	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-03-07	1100	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-04-05	1040	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-02	1100	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-31	1045	1	L.001	L.003	L.002	L.2	.010	L.009	L.004	L.002
83-07-04	1045	1	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-03-07	1100	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-05	1040	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-02	1100	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-31	1045	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-04	1045	1	L.004	L.2	L.002	L.002	L.005	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

STATION - 005A11AE0008
EAST POPLAR RIVER AT INTERNATIONAL BOUNDARY SASKAKATCHEWAN LAT. 49D 0M 0S LONG. 105D 24M 33S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-01-12	1035	3	2.0	15.4	1431.	1450.	7.8	7.6	8.8	6.6
83-02-22	1230	3	1.0	11.6	1443.	1401.	7.7	7.6	1.4	8.0
83-04-08	1320	3	7.0	17.3	958.	924.	8.3	8.1	--	5.9
83-05-02	1215	3	10.5	16.0	934.	956.	8.1	8.1	14.0	7.8
83-05-10	1400	3	8.0	20.4	934.	964.	8.3	8.3	14.0	6.5
83-06-02	1100	3	14.0	20.5	1335.	1380.	8.3	8.1	13.0	2.6
83-07-06	1148	3	22.0	12.9	1350.	1410.	8.2	8.1	17.0	1.3
83-08-12	1151	3	21.0	21.2	1388.	1380.	8.3	8.1	7.4	2.5
83-09-08	1157	3	14.0	20.8	1363.	1390.	8.3	8.2	6.6	1.6
83-10-06	1227	3	7.0	20.0	1394.	1450.	8.2	8.1	7.0	4.5
83-11-03	1228	3	6.5	18.4	1433.	1480.	8.2	8.0	9.2	4.4
83-12-01	1205	3	.5	7.0	1482.	1470.	7.7	7.4	8.1	2.4

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	05717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-01-12	1035	3	10.	5.	--	.004	L2.	L2.	--	8.0
83-02-22	1230	3	20.	5	--	.005	4	2.	--	10.3
83-04-08	1320	3	30.	11	--	.006	--	--	--	11.5
83-05-02	1215	3	30.	15.	--	.006	L2	L2.	--	9.7
83-05-10	1400	3	20.	9.	--	.008	18.	12.	--	9.0
83-06-02	1100	3	20.	13	--	.020	6.	2.	--	10.2
83-07-06	1148	3	10.	9	--	.010	28.	22	--	9.7
83-08-12	1151	3	20.	9.	--	.002	14.	L2.	--	6.6
83-09-08	1157	3	10.	5.	--	.005	70	42.	--	9.9
83-10-06	1227	3	10.	5.	--	.002	14.	L2.	--	10.3
83-11-03	1228	3	20.	12.	--	.006	--	210	--	9.5
83-12-01	1205	3	10.	4	--	.001	4.	L2.	--	7.5

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-01-12	1035	3	0.	.0	677.	555.0	57.3	54.0	365.4	200.0
83-02-22	1230	3	0.	.0	634.	520.0	56.1	53.0	358.3	190.0
83-04-08	1320	3	0.	.0	433.	355.0	45.0	36.3	261.8	125.0
83-05-02	1215	3	0.	.0	421.	345.0	43.0	34.6	249.8	120.0
83-05-10	1400	3	0.	.0	427.	350.0	42.5	36.0	254.3	130.0
83-06-02	1100	3	0.	.0	603.	495.0	59.1	48.5	347.2	190.0
83-07-06	1148	3	0.	.0	597.	490.0	51.3	50.0	333.9	210.0
83-08-12	1151	3	0.	.0	579.	475.0	43.7	52.0	323.2	226.0
83-09-08	1157	3	0.	.0	585.	480.0	39.4	53.0	316.6	208.0
83-10-06	1227	3	0.	.0	646.	530.0	46.1	51.0	325.1	189.0
83-11-03	1228	3	0.	.0	605.	496.0 06L	61.2	52.1	367.3	199.0
83-12-01	1205	3	0.	.0	611.	501.0 06L	88.6	51.3	432.4	199.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-01-12	1035	3	8.3	6.3	.31	304.	17.0	980.	--	.003
83-02-22	1230	3	7.9	6.0	.23	308.	15.0	948.	--	.002
83-04-08	1320	3	11.0	4.6	.15	196.	3.6	635.	--	.012
83-05-02	1215	3	11.0	4.5	.20	170.	3.4	594.	--	.003
83-05-10	1400	3	11.0	4.7	.16	174.	3.6	612.	--	.002
83-06-02	1100	3	11.0	4.9	.32	260.	6.3	877.	--	.003
83-07-06	1148	3	8.0	6.0	.23	288.	12.0	919.	--	.003
83-08-12	1151	3	8.6	5.9	.29	286.	6.8	914.	--	.005
83-09-08	1157	3	8.3	6.1	.27	272.	6.8	882.	--	.002
83-10-06	1227	3	8.5	6.2	.30	270.	10.0	899.	--	.004
83-11-03	1228	3	8.7	5.6	.26 08L	307.	10.2 02L	941.	--	.009
83-12-01	1205	3	8.2	6.0	.25 08L	301.	14.6 02L	969.	--	.002

STATION - 00SA11AE0008 LAT. 49D 0M 0S LONG. 105D 24M 33S
EAST POPLAR RIVER AT INTERNATIONAL BOUNDARY SASKAKATCHEWAN

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-01-12	1035	3	.016	.003	.013	--	.83	.80	.04	.84
83-02-22	1230	3	.043	.003	.040	--	.56	.58	.11	.69
83-04-08	1320	3	.042	.018	.024	--	.54	.52	.33	.85
83-05-02	1215	3	.038	.018	.020	--	.54	.55	.11	.66
83-05-10	1400	3	.038	.018	.020	--	.58	.58	.12	.70
83-06-02	1100	3	.055	.015	.040	--	.31	.35	.10	.45
83-07-06	1148	3	.032	.012	.020	--	.33	.35	.03	.38
83-08-12	1151	3	.026	.007	.019	--	.28	.28	L.01	0.29
83-09-08	1157	3	.015	.015	.000	--	.27	.29	.03	.32
83-10-06	1227	3	.017	.012	.005	--	.34	.33	.06	.39
83-11-03	1228	3	.031	.003	.028	--	48	47	.04	.51
83-12-01	1205	3	.015	.013	.002	--	.66	.64	.02	.66

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-01-12	1035	3	.12	.7	5.0	.30	5.3	2.10	.0014	L.0005
83-02-22	1230	3	.15	.4	5.4	.58	6.0	1.90 05L	.0010	L.0005
83-04-08	1320	3	.07	L.1	8.1	2.20	10.3	.96	.0011	L.0005
83-05-02	1215	3	.03	.1	8.4	71	9.1	.97	.0014 04L	L.0005 02L
83-05-10	1400	3	.03	.1	8.5	59	9.1	1.00	.0019	L.0005
83-06-02	1100	3	L.01	L.1	6.3	.59	6.9	1.60	.0020	L.0005
83-07-06	1148	3	.02	L.1	6.0	.21	6.2	1.90	.0035	L.0005
83-08-12	1151	3	L.01	L.1	5.6	.30	5.9	1.90	.0026 08D	L.0005 08D
83-09-08	1157	3	L.01	L.1	5.8	.22	6.0	1.90	.0024 08D	L.0001 08D
83-10-06	1227	3	.06	.1	5.1	36	5.5	1.90	.0036 08D	L.0001 08D
83-11-03	1228	3	.08	.5	5.3	.30	5.6	1.90	.0030 08D	.0001 08D
83-12-01	1205	3	.11	1.3	5.0	.16	5.2	--	.0018 08D	L.0001 08D
	1205	3	--	--	--	--	--	--	.0018 08L	L.0000 08L

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-01-12	1035	3	.04	--	--	.16	--	L.04	L.02	L.001
83-02-22	1230	3	.04	--	--	.17	--	.05	L.02	L.001
83-04-08	1320	3	.04	--	--	.04	--	.07	L.02	L.001
83-05-02	1215	3	.08	--	--	.05	--	.04	L.02	L.001
83-05-10	1400	3	.08	--	--	.05	--	L.04	L.02	.001
83-06-02	1100	3	.06	--	--	.17	--	.04	L.02	L.001
83-07-06	1148	3	.17	--	--	L.01	--	.07	L.02	L.001
83-08-12	1151	3	.20	--	--	.12	--	.05	L.02	L.001 02P
83-09-08	1157	3	.14	--	--	.09	--	.07	.02	L.001 02P
83-10-06	1227	3	L.10	--	--	.16	--	.04	L.02	.001 02P
83-11-03	1228	3	.17	--	--	.13	--	L.04	L.02	.002 02P
83-12-01	1205	3	L.10	--	--	.17	--	.05	L.02	.002 02P

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-01-12	1035	3	--	L.002	.002	L.001	.008	L.001	L.05	L.004
83-02-22	1230	3	--	L.002	L.002	.001	.001	L.001	L.05	L.004
83-04-08	1320	3	--	L.002	L.002	.003	--	L.001	.05	L.004
83-05-02	1215	3	--	.002	L.002	.003	--	L.001	L.05	L.004
83-05-10	1400	3	--	L.002	L.002	.003	.005	L.001	.05	L.004
83-06-02	1100	3	--	L.002	.003	.002	.005	L.001	L.05	L.004
83-07-06	1148	3	--	L.002	L.002	.002	L.001	.025	L.05	L.004
83-08-12	1151	3	--	L.002 02P	L.002 02P	L.001 05P	.001 05P	L.001 02P	.05 01P	L.004 02P
83-09-08	1157	3	--	L.001 02P	.002 02P	.001 05P	.001 05P	L.001 02P	L.10 01P	L.001 02P
83-10-06	1227	3	--	L.001 02P	.002 02P	.001 05P	L.001 05P	L.001 02P	.13 01P	.002 02P
83-11-03	1228	3	--	L.001 02P	L.001 02P	L.001 05P	L.001 05P	L.001 02P	L.10 01P	.001 02P
83-12-01	1205	3	--	L.001 02P	.001 02P	L.001 05P	.002 05P	L.001 02P	L.10 01P	.002 02P

STATION - 05SA11AE0008
EAST POPLAR RIVER AT INTERNATIONAL BOUNDARY SASKAKATCHEWAN LAT. 49D 0M 0S LONG. 105D 24M 33S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-01-12	1035	3	.001	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-02-22	1230	3	.002	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-04-08	1320	3	.003	L.001	.004	L.001	L.001	L.002	L.001	L.001
83-05-02	1215	3	.004	L.001	005	L.001	L.001	L.002	L.001	L.001
83-05-10	1400	3	.004	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-06-02	1100	3	.006	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-07-06	1148	3	.005	L.001	L.001	L.001	L.001	L.002	L.001	L.001
83-08-12	1151	3	.003	L.001	.002	L.001	L.001	L.002	L.001	L.001
83-09-08	1157	3	002	L.001	.007	002	L.001	L.002	L.001	L.001
83-10-06	1227	3	.001	L.001	008	001	L.001	L.002	L.001	L.001
83-11-03	1228	3	002	L.001	007	L.001	L.001	L.002	L.001	L.001
83-12-01	1205	3	--	L.001	.001	L.001	L.001	L.002	L.001	L.001

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELORIN) UG/L
83-01-12	1035	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-02-22	1230	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-04-08	1320	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-02	1215	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-05-10	1400	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-06-02	1100	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-07-06	1148	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-08-12	1151	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-09-08	1157	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-10-06	1227	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-11-03	1228	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002
83-12-01	1205	3	L.004	L.01	L.002	L.001	L.003	L.001	L.002	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18061L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-01-12	1035	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-02-22	1230	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-04-08	1320	3	L.001	L.003	L.002	L.2	.060	L.009	L.004	L.002
83-05-02	1215	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-05-10	1400	3	L.001	L.003	L.002	L.2	080	L.009	L.004	L.002
83-06-02	1100	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-07-06	1148	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-08-12	1151	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-09-08	1157	3	L.001	L.003	L.002	L.2	L.004	.011	L.004	L.002
83-10-06	1227	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-11-03	1228	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002
83-12-01	1205	3	L.001	L.003	L.002	L.2	L.004	L.009	L.004	L.002

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-01-12	1035	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-02-22	1230	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-04-08	1320	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-02	1215	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-05-10	1400	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-06-02	1100	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-07-06	1148	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-08-12	1151	3	L.004	L.2	L.002	L.002	L.005	L.002	--	--
83-09-08	1157	3	L.004	L.2	--	--	--	L.002	--	--
83-10-06	1227	3	L.004	L.2	--	--	--	L.002	--	--
83-11-03	1228	3	L.004	L.2	--	--	--	L.002	--	--
83-12-01	1205	3	L.004	L.2	--	--	--	L.002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY 1983
SASKATCHEWAN

STATION - 05US05NB0001 LAT. 48D 58M 51S LONG. 103D 4M 33S
LONG CREEK 6 KM. SW OF BORDER CROSSING NEAR NOONAN, NORTH DAKOTA, USA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02061F TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	02041F SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	10301F PH PH UNITS	10301L PH PH UNITS	02073F TURBIDITY JTU	02073L TURBIDITY JTU
83-04-12	1430	3	3.5	11.2	506.	444.	7.9	7.8	52.0	4.4
83-05-13	1238	3	4.0	22.0	767.	792.	8.3	8.1	11.0	5.6
83-06-01	1440	3	17.0	20.8	1196.	1234.	8.2	8.1	6.4	2.8
83-07-30	1650	3	25.0	24.5	1190.	1236.	8.5	8.6	3.2	1.6
83-08-23	0945	3	16.0	22.1	1320.	1370.	9.0	8.9	3.4	2.6
83-12-13	1510	3	.0	14.2	1370.	1320.	8.1	7.5	1.3	2.5

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02021L COLOUR TRUE REL. UNITS	10401L RESIDUE NONFILTR. MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	06717G CHLORO-PHYLL A MG/L	36002F COLIFORMS TOTAL MF NO/DL	36012F COLIFORMS FECAL MF NO/DL	36103F FECAL STREP. MF NO/DL	08101W OXYGEN DISSOLVED DO O2 MG/L
83-04-12	1430	3	80.	37.	--	010	40.	20.	--	11.5
83-05-13	1238	3	40.	6.	--	010	30.	8.	--	11.0
83-06-01	1440	3	40.	3.	--	.005	16.	12.	--	9.4
83-07-30	1650	3	30.	3.	--	.006	50.	50.	--	9.0
83-08-23	0945	3	30.	4.	--	.007	--	129.	--	8.7
83-12-13	1510	3	--	6.	--	004	4	2	--	7.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06301L CARBONATE (CALCD.) CO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	06201L BICARBONT. (CALCD.) HCO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	20103L CALCIUM DISSOLVED CA MG/L	12102L MAGNESIUM DISSOLVED MG MG/L	10602L HARDNESS TOTAL (CALCD.) CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L
83-04-12	1430	3	0.	.0	128.	105.0	31.6	15.9	144.4	42.0
83-05-13	1238	3	0.	.0	213.	175.0	56.3	28.5	257.9	70.0
83-06-01	1440	3	0.	.0	299.	245.0	77.8	47.0	387.8	125.0
83-07-30	1650	3	6.	4.8	220.	190.0	45.1	48.5	312.3	152.0
83-08-23	0945	3	24.	20.0	232.	230.0	45.6	56.0	344.4	177.0
83-12-13	1510	3	0.	.0	286.	235.0 06L	60.5	66.9	426.7	163.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	19103L POTASSIUM DISSOLVED K MG/L	17206L CHLORIDE DISSOLVED CL MG/L	09105L FLUORIDE DISSOLVED F MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	14105L SILICA REACTIVE SIO2 MG/L	00201L TOTAL DISSOLVED SOLIDS (CALCD.) MG/L	16104P SULFIDE DISSOLVED S MG/L	06604P CYANIDE TOTAL CN MG/L
83-04-12	1430	3	10.0	8.4	.08	117.	10.0	298.	--	006
83-05-13	1238	3	8.8	10.0	.11	208.	11.0	498.	--	.002
83-06-01	1440	3	11.0	17.0	.22	380.	6.0	811.	--	.003
83-07-30	1650	3	11.0	18.0	.17	408.	2.8	799.	--	009
83-08-23	0945	3	12.0	21.0	.21	440.	1.8	891.	--	011
83-12-13	1510	3	12.7	21.4	.21 08L	508.	2.8 02L	976.	--	.003

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406L PHOSPHORUS TOTAL P MG/L	15103D PHOSPHORUS TOTAL DISSOLVED P MG/L	15901L PHOSPHORUS PARTICULATE (CALCD.) P MG/L	15256D PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	07651D NITROGEN DISSOLVED N MG/L	07651L NITROGEN DISSOLVED N MG/L	07902L NITROGEN PARTICUL. N MG/L	07603L NITROGEN TOTAL (CALCD.) N MG/L
83-04-12	1430	3	.250	150	100	--	.79	.79	.38	1.17
83-05-13	1238	3	.150	.089	.061	--	.68	.68	.18	.86
83-06-01	1440	3	.120	.090	.030	--	.68	.67	.06	.73
83-07-30	1650	3	.150	.120	.030	--	.79	.79	.05	.84
83-08-23	0945	3	.150	.120	.030	--	.82	.78	.06	.84
83-12-13	1510	3	.060	.055	.005	--	.65	.67	L.01	Q.68

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07506P NITROGEN TOTAL AMMONIA N MG/L	06104L CARBON DISSOLVED ORGANIC C MG/L	06902L CARBON ORGANIC PARTICUL. C MG/L	06002L CARBON TOTAL ORGANIC (CALCD.) MG/L	05105D BORON DISSOLVED B MG/L	33104D ARSENIC DISSOLVED AS MG/L	34102D SELENIUM DISSOLVED SE MG/L
83-04-12	1430	3	.18	L.1	11.0	2.60	13.6	.16	.0017	L.0005
83-05-13	1238	3	.02	L.1	10.0	.70	10.7	.14	.0029	L.0005
83-06-01	1440	3	L.01	L.1	11.0	.36	11.4	.12	.0027	L.0005
83-07-30	1650	3	L.01	L.1	13.0	.32	13.3	.18	.0051 08D	.0003 08D
83-08-23	0945	3	L.01	L.1	15.0	.34	15.3	.24 05L	.0060 08D	.0003 08D
83-12-13	1510	3	.01	.3	15.0	.37	15.4	.16	.0026 08L	.0003 08L

STATION - 00US05NB0001 LAT 48D 58M 51S LONG 103D 4M 33S
LONG CREEK 6 KM. SW OF BORDER CROSSING NEAR NOONAN, NORTH DAKOTA, USA

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	13302P ALUMINUM EXTRBLE. AL MG/L	47301P SILVER EXTRBLE. AG MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25104G MANGANESE DISSOLVED MN MG/L	26304P IRON EXTRBLE. FE MG/L	26104G IRON DISSOLVED FE MG/L	80011P MERCURY TOTAL HG UG/L	23020P VANADIUM TOTAL RECOVERABLE VA MG/L
83-04-12 1430	3	--	--	--	.02	--	.09	L .02	.006
83-05-13 1238	3	--	--	--	L .01	--	.07	L .02	.001
83-06-01 1440	3	--	--	--	.28	--	.05	L .02	.002
83-07-30 1650	3	--	--	--	.04	--	L .05	.02	.004
83-08-23 0945	3	--	--	--	L .02	--	.09	L .02	.004 02P
83-12-13 1510	3	--	--	--	--	--	--	.02	.001 02P

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	24302P CHROMIUM EXTRBLE. CR MG/L	27020P COBALT TOTAL RECOVERABLE CO MG/L	28020P NICKEL TOTAL RECOVERABLE NI MG/L	29020P COPPER TOTAL RECOVERABLE CU MG/L	30020P ZINC TOTAL RECOVERABLE ZN MG/L	48020P CADMIUM TOTAL RECOVERABLE CD MG/L	56020P BARIUM TOTAL RECOVERABLE BA MG/L	82020P LEAD TOTAL RECOVERABLE PB MG/L
83-04-12 1430	3	--	L .002	L .002	.004	--	L .001	L .05	L .004
83-05-13 1238	3	--	L .002	L .002	.002	.004	L .001	L .05	L .004
83-06-01 1440	3	--	L .002	.002	.002	.003	L .001	.06	L .004
83-07-30 1650	3	--	L .002	L .002	L .001	.001	L .001	.05	L .004
83-08-23 0945	3	--	L .001 02P	.004 02P	.002 05P	.002 05P	L .001 02P	L .10 01P	L .001 02P
83-12-13 1510	3	--	L .001 02P	.002 02P	L .001 05P	L .001 05P	L .001 02P	L .10 01P	L .001 02P

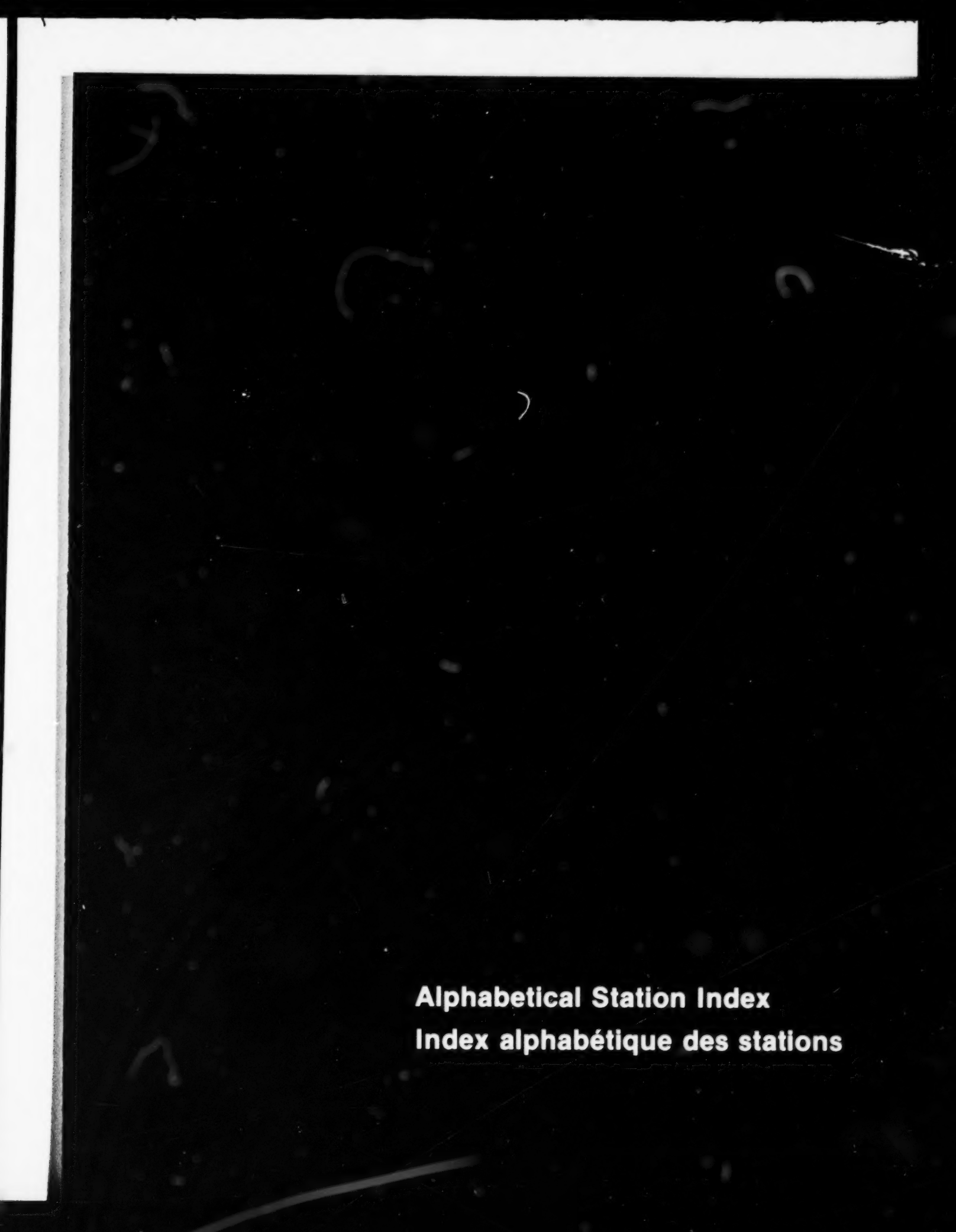
DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	06535P PHENOLIC MATERIAL PHENOL MG/L	17811L HEXACHLORO-BENZENE UG/L	18075L ALPHA-BHC UG/L	18070L GAMMA-BHC (LINDANE) UG/L	18130L ALDRIN UG/L	18010L P,P-TDE UG/L	18020L P,P-DDE UG/L	18005L O,P-DDT UG/L
83-04-12 1430	3	.010	L .001	.004	L .001	L .001	L .002	L .001	L .001
83-05-13 1238	3	.007	L .001	.004	.002	L .001	L .002	L .001	L .001
83-06-01 1440	3	.012	L .001	.002	L .001	L .001	L .002	L .001	L .001
83-07-30 1650	3	.005	L .001	.002	L .001	L .001	L .002	L .001	L .001
83-08-23 0945	3	.008	L .001	.001	L .001	L .001	L .002	L .001	L .001

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	18000L P,P-DDT UG/L	18030L P,P-METHOXY-CHLOR UG/L	18140L ENDRIN UG/L	18050L ALPHA-ENDOSULFAN UG/L	18055L BETA-ENDOSULFAN UG/L	18040L HEPTACHLOR UG/L	18045L HEPTACHLOR EPOXIDE UG/L	18150L HEOD (DIELDRIN) UG/L
83-04-12 1430	3	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-05-13 1238	3	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-06-01 1440	3	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-07-30 1650	3	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002
83-08-23 0945	3	L .004	L .01	L .002	L .001	L .003	L .001	L .002	L .002

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	18125L MIREX UG/L	18060L ALPHA-(CIS) CHLORDANE UG/L	18065L GAMMA-(TRANS) CHLORDANE UG/L	18520P MCPA UG/L	18500P 2,4-D UG/L	18550P 2,4-DB UG/L	18555P DICHLORPROP (2,4-DP) UG/L	18510P 2,4,5-T UG/L
83-04-12 1430	3	L .001	L .003	L .002	L .2	L .004	L .009	L .004	L .002
83-05-13 1238	3	L .001	L .003	L .002	L .2	L .004	L .009	L .004	L .002
83-06-01 1440	3	L .001	L .003	L .002	L .2	.020	L .009	L .004	L .002
83-07-30 1650	3	L .001	L .003	L .002	L .2	.050	L .009	L .004	L .002
83-08-23 0945	3	L .001	L .003	L .002	--	--	--	--	--

DATE TIME/ YMD/AMJ HEURE	SUB-ID/ SOUS-ID	18540P FENOPROP (SILVEX) UG/L	18601P PICLORAM UG/L	18159L AROCLOR 1242 (PCB'S) UG/L	18160L AROCLOR 1254 (PCB'S) UG/L	18162L AROCLOR 1260 (PCB'S) UG/L	18164L AROCLOR TOTAL (PCB'S) UG/L	18190P AZIN-PHOSMETHYL (GUTHION) UG/L	18195P AZIN-PHOSETHYL UG/L
83-04-12 1430	3	L .004	L .2	L .002	L .002	L .005	L .002	--	--
83-05-13 1238	3	L .004	L .2	L .002	L .002	L .005	L .002	--	--
83-06-01 1440	3	L .004	L .2	L .002	L .002	L .005	L .002	--	--
83-07-30 1650	3	L .004	L .2	L .002	L .002	L .005	L .002	--	--
83-08-23 0945	3	--	L .2	L .002	L .002	L .005	L .002	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE



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ASSINIBOINE RIVER AT HWY 8 BRIDGE BELOW KAMSACK, SASKATCHEWAN	00SA05MD0002 97900S 001	51	31	59	101	53	20	199	1
BATTLE CREEK NEAR U.S. BOUNDARY SOUTHEAST OF CONSUL, SASKATCHEWAN	00SA11AB0005 97900S 027	49	0	10	109	25	18	220	2
BATTLE RIVER NEAR UNWIN, SASKATCHEWAN	00SA05FE0001 97900S 001	52	56	25	109	52	23	175	3
BIRCH RIVER BELOW CUMBERLAND MARSHES DAM, NR.CUMBERLAND HOUSE, SASKATCHEWAN	00SA05KH0004 97900S 014	53	49	59	101	57	23	193	4
CARROT RIVER NEAR TURNBERRY, SASKATCHEWAN	00SA05KH0002 97900S 007	53	36	0	102	7	0	187	5
CHURCHILL RIVER AT OTTER RAPIDS, SASKATCHEWAN	00SA06CD0001 97900S 002	55	38	26	104	44	3	209	6
CHURCHILL RIVER BELOW WASAWAKASIK LAKE, SASKATCHEWAN	00SA06EA0003 97900S 002	55	36	29	102	11	44	213	7
CHURCHILL RIVER NEAR PATUANAK, SASKATCHEWAN	00SA06BB0004 97900S 003	55	55	30	107	43	40	207	8
DOUGLAS RIVER APPROX. 16.1KM. BELOW CLUFF CREEK SASKATCHEWAN	00SA07MA0001 97900S 002	58	19	18	109	47	8	218	9
DRAGLINE CHANNEL BELOW WSC CONTROL STRUCTURE NR. SQUAW RAPID SASKATCHEWAN	00SA05KH0003 97900S 011	53	49	59	102	56	25	190	10
EAST POPLAR RIVER AT INTERNATIONAL BOUNDARY SASKAKATCHEWAN	00SA11AE0008 97900S 003	49	0	0	105	24	33	225	11
FOND DU LAC RIVER AT OUTLET OF BLACK LAKE, SASKATCHEWAN	00SA07LC0001 97900S 002	59	8	48	105	32	20	216	12
FRENCHMAN RIVER AT THE 49TH PARALLEL SASKATCHEWAN	00SA11AC0002 97900S 083	49	0	0	107	18	10	223	13
GEIKIE RIVER BELOW JUNCTION OF WHEELER RIVER, SASKATCHEWAN	00SA06DA0001 97900S 002	57	35	20	104	12	10	211	14
LODGE CREEK NEAR WILLOW CREEK AT HWY 21, SASKATCHEWAN	00SA11AB0007 97900S 083	49	0	24	109	43	30	222	15
LONG CREEK SOUTH OF TORQUAY, SASKATCHEWAN	00SA05NA0002 97900S 001	49	9	0	103	30	0	202	16
QU'APPELLE RIVER ABOVE PASQUA LAKE, SASKATCHEWAN	00SA05JK0003 97900S 007	50	47	3	104	17	35	178	17

SASKATCHEWAN

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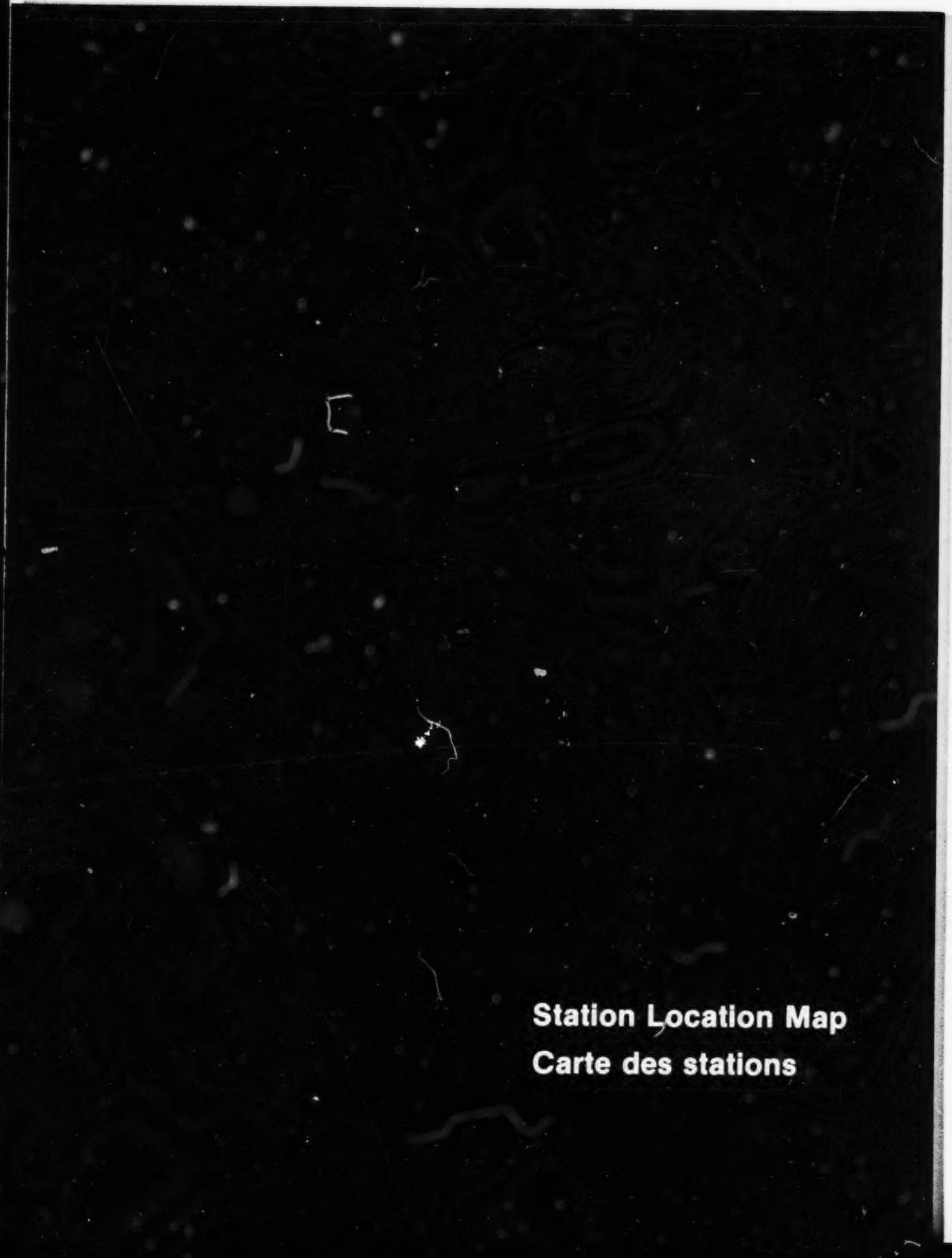
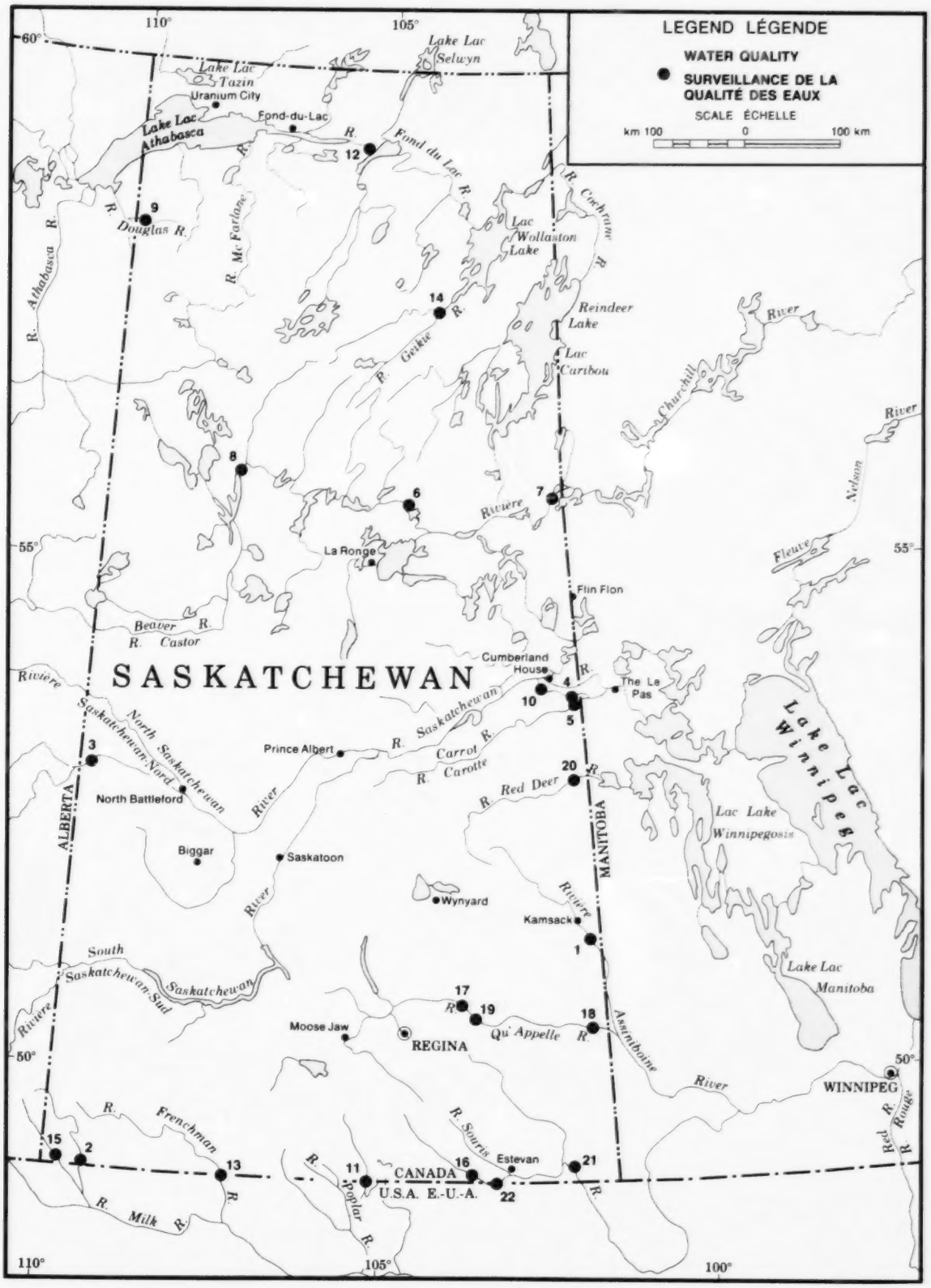
QU'APPELLE RIVER AT OUTLET OF KATEPWA LAKE, SASKATCHEWAN	**00SA05JL0001** 97900S 001	50	38	58	103	35	20	**181**	**19**
RED DEER RIVER AT ERWOOD, SASKATCHEWAN	**00SA05LC0001** 97900S 001	52	52	0	102	10	59	**198**	**20**
SOURIS RIVER NEAR GLEN EWEN, SASKATCHEWAN	**00SA05ND0001** 97900S 001	49	10	14	102	0	38	**204**	**21**
UNITED STATES									
LONG CREEK 6 KM. SW OF BORDER CROSSING NEAR NOONAN, NORTH DAKOTA, USA	**00US05NB0001** 97900S 027	48	58	51	103	4	33	**228**	**22**



Station Location Map
Carte des stations



WATER QUALITY BRANCH MONITORING STATIONS 1983

STATIONS DE SURVEILLANCE DE LA DIRECTION DE LA QUALITÉ DES EAUX 1983